

## ANTHRIBIDAE FROM SOUTH AND CENTRAL AMERICA.

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A RICH collection of South American Anthribidae entrusted to me for study by Dr. A. Avinoff, director of the Carnegie Museum, Pittsburg, Penn., was the primary incentive to overhaul, in conjunction with this collection, our own Nearctic material which had accumulated during the last thirty years. The number of species unknown to me was found to be large in both collections. As the majority of species described from South and Central America are represented either at Tring or at the British Museum by the types or by paratypes, the determination of the material was much facilitated. There remained, however, instances of species so closely resembling each other that the original descriptions of a hundred years ago applied equally well to one or the other of them and of which the types are at Stockholm. Professor O. Lundblad very generously lent me the types which it was necessary to compare, and I express here my gratitude to him for having thus assisted me in determining correctly some hitherto doubtful species.

The new species of Anthribidae which await description are numerous, one might almost say endless. For various reasons I publish here the descriptions of only a portion of the new species actually seen and compared. Another instalment may follow, if time permits.

Mr. F. Nevermann, of S. José, Costa Rica, has also submitted to me for determination several interesting species, among which were three new ones represented by small series of specimens; the descriptions of these are incorporated in this paper, as are likewise the descriptions of two new species received from the Riksmuseum at Stockholm.

The types of the new species are at Tring, if not otherwise stated, and I have retained one or more paratypes of the new species, the types of which are in the Carnegie Museum, in coll. Nevermann or in the Riksmuseum. I cordially thank the donors, and particularly Dr. A. Avinoff for his patience and generosity.

Most of the species here described belong to the genera *Gymnognathus* and *Phaenithon*. It is interesting to note that there is a resemblance in colour and pattern between several species of the two genera, and even such a peculiar ♂-character as the deep groove on the head of certain species of *Gymnognathus* is found again in at least one species of *Phaenithon*.

1. *Tribotropis subvittatus* sp. nov.

♂. As in *T. vittatus* Kirsch 1888 the prosternum without transverse fossa and head and pronotum with median vitta.

Black; antenna, tibiae and tarsi rufous, apex of antenna and tarsi more or less black. Median stripe of rostrum, head and pronotum buff, a similarly coloured lateral stripe from eye to base of pronotum, not separate on pronotum from colouring of underside, less regular than median stripe and enclosing several irregular black spots; lateral carina longer than in *T. vittatus*. Elytra strongly depressed at suture, interspace III convex, at beginning of apical declivity

costate, V here likewise costate and higher than III, the whole surface with buff pubescence which encloses many black spots from III to X, these spots in V linear, sutural depression predominantly buff, sutural interspace tessellated with black, II almost entirely buff.

Below buff at side; intercoxal process of mesosternum not humped as in *T. vittatus*, but declivous, flat, subtriangular, with apex rounded; abdominal sternum I without sex-mark.

Length: 19, width 6 mm.

Ecuador: Rio Pastazza, 1 ♂.

## 2. *Ischnocerus malleri* sp. nov.

♂♀. Eye smaller than in *I. aeneus* Jord. 1895. Pronotum with a very slight depression each side of middle, centre very feebly convex, without tufted tubercle, sides strongly convex, more rounded than in *I. aeneus*; dorsal carina straight. Derm of elytra less metallic than in *I. aeneus*; subbasal tubercle high, not divided into two, not tufted; interspaces III, V and VII costate in posterior half, III highest, these ridges not divided into tubercles and not tufted. Foretibia strongly compressed, broader than in *I. aeneus*.

Pubescence of upper- and underside and legs grey, almost evenly distributed in small spots and patches, the underside and femora especially being irrorated or pencilled with grey, pubescence not condensed on rostrum, head and middle area of pronotum; suture and alternate interspaces not tessellated with black, interspace II and alternate ones not buff.

Brazil: Hansa Humboldt, Sta. Catarina (Anton Maller), one pair; named in honour of the collector, from whom I have received several new Anthribidae.

## 3. *Goniocloeus morulus* sp. nov.

♂♀. Black, pronotum almost impunctate, elytra with numerous tubercles; pubescence greyish white, condensed in dispersed small spots, which are numerous as a rule, a lateral row on abdomen definite; segment XI of antenna and III and IV of tarsi pale rufescent buff.

Rostrum a little more than half as broad again as long, with numerous shallow punctures, at base a median carina flanked by a depression; another depression, but shallower, behind apex on each side. Frons less than half the width of rostrum (♂ 1:3, ♀ 1:2½), punctate-subreticulate, with indication of median carina, occiput depressed each side, the depressions extending from behind eye obliquely forward, disappearing on frons, behind and above eye as well as in centre of occiput a diffuse white spot. Club of antenna almost compact, 2½ times as long as broad (17:7), all three segments broader than long, X transverse (14:9), XI round apart from truncate base; apices of IX and X often pale.

Pronotum one-third broader than long, the greyish white pubescence forming diffuse and partly confluent spots, 7 behind carina and 16 to 18 between carina and apical margin; in front of carina a median swelling, tuberculiform, rounded, on each side and in front of it a depression, the lateral depression extending sideways, widening above lateral carina, the anterior depression extending obliquely forward and sideward, gradually becoming subapical; dorsal carina somewhat undulate, curved forward at side in a broad irregular arc to two-thirds

of length of prothorax, lateral angle faintly indicated and lateral carina somewhat incurved before angle. Scutellum white.

Elytra one-fourth longer than broad, with parallel sides; greyish white pubescence diffuse, tubercles more or less black, suture dotted with black, subbasal tubercle and median one of third interspace large, rounded, the former the larger, in apical half two smaller tubercles in III and a vestigial one near apical margin, in V four tubercles, smaller than the corresponding ones of III and placed more forward except the subbasal one, which is placed at the side of the large tubercle of III, at apex a depression, in VII four small tubercles and in front of apical depression a vestige of a fifth, IX with four feebly raised black spots and two or three white dots. Pygidium impunctate.

White pubescence of underside thin, metepimerum and a row of four lateral dots on abdomen white; prosternite and abdomen impunctate, punctures on side of metasternite small, shallow and scattered. Tibiae with antemedian white ring; basal half or third of tarsal segment I and base of II white above.

Length: 5.3–6.7, width 2.7–3.4 mm.

Amazonas: Pará (type) and Santarem, type in Carnegie Museum, Pittsburg; also from Costa Rica (F. Nevermann).

#### 4. *Goniocloeus marilis* sp. nov.

♂. Like *G. morulus* (No. 3), smaller, with few buff and white conspicuous markings; base of rostrum without median carina; sides of pronotum from near dorsal carina to apex and depression around antebasal median tubercle punctate; tubercles in apical half of elytra and in interspaces V and VII much lower, mere pustules, no conspicuous white dots except one before middle in interspace V; tarsal segment I not white above. Lateral spot and median dot of occiput and lateral apical spots of pronotum buff.

Length: 3.7, width 1.9 mm.

Amazonas: Santarem, 3 ♂♂, type in Carnegie Museum.

#### 5. *Monocloeus furvus* sp. nov.

♀. A small species similar to *M. or* Jord. 1904. Club of antenna not loose as in *M. or*, but compact, segments X and XI being broad at base and fitting into the apex of the preceding segment. Pronotum creamy buff at sides, the brown median area occupying anteriorly half the surface and posteriorly less than one-third, within it some creamy-buff speckles and a vestigial median vitta, in lateral area three small, ill-defined, black spots. Base of elytra not rufescent and not creamy buff, but dark-coloured like the rest of the elytra, subbasal swellings less prominent than in *M. or*, third interspace without median tubercle, no small tubercles elsewhere, in interspace III a creamy-buff spot behind antemedian depression followed by a short black line which is very slightly elevate and ends at a postmedian creamy-buff spot; each of these buffish spots, but farther back, accompanied by a small spot in V, a number of more or less indefinite creamy-buff spots and scattered pubescence of the same colour in apical half of elytra. Tibiae with grey antemedian ring, tarsal segment I grey above.

Length 4.0–4.5, width 2.0–2.3 mm.

Amazonas: Santarem, type in Carnegie Museum.

### 6. *Monocloeus inaequalis* sp. nov.

♂♀. Closely agreeing with *M. spiniger* Jord. 1904; subapical tubercle of interspace III of elytra not long, conical and pointed, but small, not larger than the corresponding tubercle of interspace VII.

"Brazil," type ex coll. Dejean with a label bearing above name; in Carnegie Museum from Rio de Janeiro and Santarem.

### 7. *Piezocorynus polimelas* sp. nov.

Like *P. brevis* Jord. 1904 somewhat out of place in this genus on account of the dorsal carina of the pronotum being subbasal, parallel with basal margin and ending abruptly at side or slightly curving forward.

♂♀. Ovate, strongly convex, subglobular. Pitchy black, antenna paler, pubescence of upper- and underside greyish white, sparse, evenly distributed, not concealing the colour of the derm, but somewhat denser on scutellum, metepimerum, a subbasal tibial ring and proximally on tarsal segments I and II.

Rostrum flat, broader than long (17:14), densely punctate-rugulate. Head punctate-granulate. Club of antenna very loose, X and XI (or only XI) pale buff.

Pronotum more than one-third broader than long, straight at sides from angle of carina, evenly convex, densely granulose-coriaceous, the granules arranged more or less in transverse ridges; distance of carina from basal margin about the length of antennal segment XI, practically the same from side to side, the lateral angle projecting sideways, so that the basal longitudinal carinula forms a very acute angle with dorsal carina.

Elytra subglobular, strongly rising from basal margin, behind subbasal swellings transversely slightly depressed, from before middle regularly declivous-convex towards sides and apex, as in *P. tristis* Jekel 1855; punctate-striate, none of the interspaces convex. Pygidium longer than broad in both sexes.

Sides of thoracic sterna dispersedly punctate. Intercostal process of mesosternum as in *P. tristis* truncate, nearly twice as broad as long. Anal sternum of ♀ triangular, the smooth tip visible from above.

Length 5.5, width 3.7 mm.

Amazonas: Santarem, two pairs, type in Carnegie Museum.

### 8. *Piezocorynus pullinus* sp. nov.

♂♀. Subcylindrical, black, spotted with grey or luteous; segments X and XI of antenna somewhat longer than broad; angle of pronotal carina about 90°, but very strongly rounded; subbasal callosity of elytrum prominent. Near *P. homoeus* Jord. 1904 in colouring. Derm sometimes rufescent; pubescence grey, not concealing the colour of the derm, two minute creamy spots at eye. Antenna thin, rufous or rufescent, VIII slightly widening towards apex, club of the narrow and loose type, IX triangular, nearly twice as long as broad in ♂, in ♀ about one-half longer than broad, X triangular, somewhat longer than broad, XI ovate-elliptical, pale creamy buff.

On pronotum a short apical median dash, a median basal spot and a lateral antemedian minute dot white, inconspicuous, centre distinctly raised, the disc



being somewhat depressed at the sides and behind this swelling ; carina subbasal, almost straight, slightly convex halfway to side, flexed forward at side nearly in a semicircle, running first forward and before reaching the vestigial meral suture turning upward-forward and disappearing at apical third ; between dorsal carina and carinate basal margin a complete transverse carinula, which is nearer the dorsal carina at sides than in middle ; behind dorsal carina at each side of middle the grey pubescence scarce, there being an indistinct blackish patch which extends more or less across the carina.

Scutellum creamy. Elytra coarsely punctate-striate, suture and convex alternate interspaces spotted with luteous or grey, the spots numerous and small at suture, few and somewhat longer elsewhere, III with short black postmedian elevate dash.

Legs and underside of body uniformly and rather sparsely pubescent grey, tibiae without spots or rings. Middle of abdomen not flattened in the specimens with long antennae, which I take to be ♂♂ (not dissected).

Length 4.4–5.5, width 2.1–2.6 mm.

Amazonas : Santarem, a series, type in Carnegie Museum.

### **Gymnognathus** Schönh. 1826.

The name appears first in the TABULA SYNOPTICA on p. 4 of *Curcul. Disp. Meth.* (1826) as Subgenus H *Gymnognathus* nob. Typus : *Anthr. (Gymnogn.) signatus* nob.

Both the genus and species were new and without diagnosis. On pp. 37–38 the generic description is supplied and the statement added : *Typus* :—*Anthr. Ancora* Germ.—congenericus : *Anthr. (Gymnogn.) signatus* nob.

As the generic and specific names of p. 4 are *nomina nuda*, the designation of *signatus* as genotype on p. 4 is not valid. The genotype is *Anthribus ancora* Germar 1824, designated on p. 38.

The species are numerous ; 80-odd are now known, and I have seen many more. In the Key given after the descriptions of the new species I have divided the genus into two Sections in accordance with the surface structure of the pronotum. In Section I the derm is minutely coriaceous, rarely rugulose, and in Section II it is longitudinally plicate, the ridges being sometimes confined to a narrow median space in front of carina and concealed by the median vitta. To some extent the pattern of species belonging to Section I recurs in Section II. The antennae of some species of Section II are long as in *Analotes discoideus* Fährs. 1839, and as there are intermediates between the longicorn and the brevicorn species, I have as yet not found any reliable difference by which to separate *Analotes* inclusive of the longicorn *Gymnognathus* from the brevicorn *Gymnognathus*, and for that reason I have included *Analotes discoideus* in the Key of Section II. One might, of course, place all the species with plicate pronotum into *Analotes*, but I am not prepared to follow that course, since I am not yet sure that the division into the two Sections is more than a mere convenience.

The only described species I cannot place in the Key is *G. nebulosus* Motsch. 1874, from Brazil, the description containing no detail for recognizing the species.

SECTION I.—PRONOTUM NOT LONGITUDINALLY PLICATE.—

SPECIES 9-34.

9. *Gymnognathus bryanti* sp. nov.

♂♀. Similar to *G. ruficlava* Jord. 1906, but elytra without brown V-mark.

As in *G. ruficlava* head and anterior half of pronotum orange-red, contrasting with rostrum. Pronotum rather coarsely granulate, the transverse ridges distinct, carina somewhat abruptly flexed forward; basal half creamy, this colouring projecting forward in middle and enclosing two brown patches on each side in front of carina; fringe of apical margin creamy. Interspace II and alternate ones of elytra white, these stripes divided in apical half into two lines each. Pygidium in ♂ as long as broad, in ♀ very little longer, apical teeth distinct but short, white median line distinct. Occiput of ♂ with ovate groove, diameter of groove much longer than distance of groove from eye.

Brazil: Ilha Santo Antonio, near Santos, iii. 1912 (G. E. Bryant), two pairs.

Of *G. ruficlava* only the ♀ is known; the posterior half of its pronotum ashy, with six blackish brown spots before carina and two behind it, besides vestiges of other brown spots, the area anteriorly straight, not produced forward in middle; white lines of elytra thin from near base, almost restricted to the punctate stripes; metasternite more extendedly pubescent luteous at side than in *G. bryanti*.

10. *Gymnognathus hetarus* sp. nov.

♂♀. Similar to *G. cincticollis* Jord. 1895; as in that species head and pronotum orange-red; on pronotum an apical marginal band and another before dorsal carina extending on to ventral surface, a short median vitta from carina forward, three patches behind carina ochreous, on elytra a dark-brown V from shoulder across suture, basal fourth with pale ochreous stripes and spots, on rest of elytra interspaces II and alternate ones grey or with thin grey lines on the rows of punctures. Underside spotted as in *G. cincticollis*. Differs from that species in the proboscis being longer, the antennal segments VI to VIII thinner (not compressed), the median basal spot of pronotum broader, the pygidium and anal sternum truncate-emarginate, with the angles distinct, but rounded off, and in the midtibia of ♂ being devoid of the apical tooth present in ♂ of *G. cincticollis*.

Length 7.0-9.0 mm.

Amazonas (Dr. Hahnel), type; also from French Guiana; in Carnegie Museum from Pará and Santarem.

11. *Gymnognathus helma* sp. nov.

♂. Likewise near *G. cincticollis*, broader, head (♂) with deep median groove, transverse band in front of carina of pronotum shortened, not reaching to median vitta, pygidium with large brown median area, truncate, with the angles somewhat acuminate.

Rostrum and frons dark rufescent, with broad pale ochreous stripe divided by the denuded median carina and covering the entire frons to the eyes, reaching just on to occiput, not continued along eye sideways. Groove (♂) ovate, deep, bounded by the forked median carina except posteriorly, where the margin of the groove is slanting; occiput without any vittae. Antenna hardly reaching

to middle of prothorax, segment III as long as II, VI to VIII gradually broader, VIII less than one-half longer than broad. Pronotum red like occiput, except basal third, which is dark rufescent; median vitta complete, broad behind carina, widening at anterior side of carina and gradually and strongly narrowing to apex, where it is quite thin, but expands a little on fringe of margin; in front of lateral carina an oblique vitta extending down to coxa and upward to anterior margin behind upper half of eye, not being continued along margin to middle as it is in *G. cincticollis* and *G. hetarus*, a broad transverse patch before carina from angle dorsad representing the transverse band of allied species, but not attaining median vitta; lateral carina not quite twice as long as longitudinal basal carinula, its tip turned dorsad.

On elytra an indistinct stripe from above shoulder to subbasal swelling devoid of grey pubescence, not continued to suture, interspace I and II, and more or less also IV and VI covered with thin grey pubescence, the other interspaces rufous, the stripes of punctures grey, at margin a large spot below shoulder, a smaller one before middle and a triangular anteapical one longest at margin and posteriorly somewhat extending upward, dorsally in front of apical declivity an indication of an oblique spot from second to fourth line of punctures. Pygidium a little longer than broad (10:9), the creamy border of base and sides somewhat diffuse.

Pubescence of underside as in the allied species, the lateral stripe of abdomen consisting of three conspicuous spots; anal segment truncate-sinuate, its angles rounded, medianly it is about as long as segment IV laterally. Femora and base of tibiae rufescent like sterna, rest of tibiae and the tarsi black, apart from some sparse grey pubescence.

Length 6.6, width 3.0 mm.

Amazonas (Dr. Hahnel), 1 ♂.

#### 12. *Gymnognathus lyrestes* sp. nov.

♀. Near *G. acutangulus* Jord. 1895, but head and thorax the same dark chestnut-colour as elytra. Pronotum before lateral carina with oblique vitta, which extends down to coxa, above angle a short vitta. Pygidium brown bordered with white, truncate like anal sternum, angles distinct, but not spiniform.

Rostrum about one-third broader than long, with broad ochre-yellow vitta divided by median carina; the vitta forking on frons, the two branches bordering eyes and joining oblique vittae of pronotum, no median vitta on head. Antenna short, blackish, segment II longer than III, VIII a little longer than broad, club nearly as long as IV to VIII together, X transverse, half as broad again as long (♀).

Pronotum minutely coriaceous, convex, slightly flattened in front of carina, markings greyish white or yellowish, median vitta complete, widest behind carina, a short vitta from lateral basal angle obliquely forward not nearly reaching middle, oblique dorso-lateral vitta in front of lateral carina broader than anterior half of median vitta; lateral angle of carina 90°, basal longitudinal carinula strongly oblique, forming equal angles with dorsal and lateral carinae. Scutellum white or yellowish.

Elytra very moderately depressed at suture, posteriorly evenly convex, third interspace not elevate; in depression between basal margin and feeble subbasal swelling a large spot, on suture behind scutellum a short vitta which

divides at one-fourth of length of suture into two stripes, one on each elytrum, occupying interspace II and posteriorly also III and curving sideward-forward at two-thirds of suture in the direction of antemedian lateral spot, which it does not reach in type, on apical declivity a strongly curved (anteriorly convex) narrow band from side to side, complete or interrupted, no spot at apex, at lateral margin a spot below shoulder, slightly extending upwards behind (probably sometimes reaching basal spot), a second spot above apex of metepimerum, separate from oblique transverse band or forming its marginal end. Pygidium as long as broad (propygidium not inclusive), creamy border interrupted at base, angles less distinct than those of anal sternum.

Underside silky grey, the pubescence condensed and creamy or buff in two stripes each side of prosternite (the lateral one being the lower end of the lateral oblique vitta of pronotum), on side of mesosternite, apex and base of side of metasternite and on side of abdominal segments I to IV. Femora and base of tibiae dark chestnut, rest of tibiae blackish like tarsi.

Length 6.2-6.8, width 2.2-2.6 mm.

Amazonas: Santarem, type in Carnegie Museum.

### 13. *Gymnognathus acastus* sp. nov.

♂♀. A robust species; pronotum minutely coriaceous, with a short vitta between dorsolateral and median vittae, pygidium completely rounded at apex, brown, bordered with grey, anal sternite strongly bispinose.

Rufous chestnut (type) or chestnut, markings of head and pronotum buffish, those of elytra buffish or grey. Rostrum with broad vitta divided by median carina, separating on frons into three stripes, median one thin, lateral ones broad and distinctly extending down to posterior side of eye. Antenna reaching beyond apex of prothorax, segment III longer than II, twice as long as IV, VIII little longer than broad, club as long as II + III, XI nearly as long as IX + X. Prothorax conical, widest at extreme base, one-sixth broader than long, medianly depressed before carina, the depression extending to apical margin as a shallow median channel occupied by median vitta, which latter strongly narrows apicad; dorsolateral vitta from upperside of lateral carina to lateral stripe of head broad, its upper margin at angle of carina, the angle itself not being filled in with buff pubescence, short laterodorsal vitta narrow, not nearly reaching to middle, parallel with dorsolateral vitta; angle of carina 90°, lateral carina reaching halfway to apical margin, basal longitudinal carinula oblique, forming a larger angle with lateral carina than with dorsal one. Scutellum buffish or white, longer than broad, narrowing anteriorly.

Elytra strongly flattened-depressed from base, interspaces III to IX somewhat convex in posterior half, especially V, before apical margin a depression, centre of declivous area of each elytrum with indication of a hump; a buffish or grey sutural area from base about to apical fourth, divided on suture anteriorly and posteriorly, the scutellum being placed in a brown triangle, in middle the area occupying interspaces I, II and III, anteriorly I and II and entering a little into III, posteriorly occupying also IV, in type an additional spot in V; from much before middle a thin stripe on fourth line of punctures runs forward to a basal patch placed in a depression above shoulder-angle, first and second line of punctures with some grey pubescence from sutural area to apex, similar lines indicated elsewhere, at side a spot below shoulder extending posteriorly obliquely



to seventh line of punctures, an antemedian mark composed of a marginal spot and a longer dash above it, and a line beginning above base of abdominal segment II and ending above IV, on apical area a few grey scale-hairs, but no definite spot. Pygidium as broad as long, very little narrowing apicad, but apex strongly and evenly rounded, a narrow grey border all round, interrupted by the basal median groove.

Pubescence of underside silky, not dense, more concentrated and therefore more creamy in a stripe from forecoxa obliquely forward-sideward, in another indefinite stripe behind meral suture of prosternite, on mesepimerum, at base and apex, laterally, of metasternite, and on abdomen except a diffuse sublateral stripe. Legs rufous chestnut, tip of tibiae and the tarsi blackish. In ♂ apex of anal sternum straight between the teeth, in ♀ rounded.

Length 8.0-8.7, width 3.1-3.5 mm.

French Guinea: St. Jean de Maroni, one pair; in Carnegie Museum also from Santarem.

#### 14. *Gymnognathus iris* sp. nov.

♂♀. As in *G. ancora* Germ. 1824 pygidium longer than broad and bidentate, anal sternum in ♂ truncate and broadly impressed, the groove flanked by a straight carina, middle of prosternum and the abdomen with the exception of a creamy lateral stripe dark chestnut, upperside of rostrum and anal spot of elytrum often vermilion. Differs in the occiput being without a median vitta, in the laterodorsal vitta of pronotum being complete, the angle of carina less broadly filled in with grey; the spot on the subbasal callosity of the elytrum much larger and connected by a band across suture with the spot of the other elytrum, this transverse band usually with a short projection forward and a much longer one backward, both on suture, the brown design sometimes resembling a fleur-de-lis, in some specimens the sutural stripe joins the posterior brown area; brown median stripe of pygidium sharply defined.

French Guiana (type) and Amazonas; in Carnegie Museum from Pará.

In type-specimen the apical spot of elytra greyish white, narrow, oblique, anteriorly united with spot of other elytrum; in most other specimens the two spots larger and as a rule separate.

#### 15. *Gymnognathus hedys* sp. nov.

♂ Cylindrical, elytra flattened above, but not depressed in sutural area; pygidium somewhat broader than long, bidentate, with rufous median stripe; dorsolateral vitta of pronotum anteriorly and posteriorly united with white underside, which extends upwards above lateral carina. Near *G. thecla* Jord. 1906.

Pale rufous. Rostrum one-third broader than long, with creamy vitta divided by median carina, forked on frons, bordering the eyes; no median vitta on head. Antenna short, segment III one-tenth longer than II, much longer than IV, V to VIII gradually shorter, VIII broader than VII, as broad as long, club twice as long as broad, XI broader than long.

Pronotum coriaceous, convex, feebly flattened dorsally before carina and along middle, median vitta complete, gradually narrowed, white area of underside extending well above lateral carina from base to apex, the carina entirely within the white area, dorsolateral vitta nearly interrupted before middle, separated

from white ventrolateral area by a long narrow rufous stripe from well before dorsal carina to beyond middle parallel with lateral carina ; this carina twice as long as slanting basal lateral carinula and its tip curved upwards. Scutellum white, broader than long.

Elytra cylindrical, feebly flattened above, not impressed in sutural area, a little over two-thirds longer than broad (58 : 34), a large grey area from base, expanding from shoulder to shoulder and dividing before middle of suture into two lobes, one on each elytrum, the lobe twice as long as broad and laterally at its apex with a tooth somewhat projecting in the direction of the antemedian limbal spot, outer margin of grey area gradually incurved from shoulder to fourth line of punctures and then curving gradually to sixth line ; on feebly indicated subbasal swelling a round rufous spot, before apex a thin transverse curved band from side to side and in sutural angle of each elytrum a triangular spot, at margin below shoulder and before middle a smallish spot. Pygidium with the brown median stripe sharply defined, narrow at base, gradually widened towards apex.

Underside densely pubescent white ; no brown spot on metepisternum, but abdominal segments with a rather large brown apical spot each at side ; anal sternum a little shorter than preceding one, rounded, faintly straightened in middle.

Length 5.5, width 2.3 mm.

Panama : Chiriqui, 1 ♂.

In *G. thecla* Jord. 1906, also from the Chiriqui, the brown median area of occiput extends to apex of rostrum, the vittae being narrow ; the anteapical band of elytra widened forward on suture.

#### 16. *Gymnognathus mollis* sp. nov.

♀. Similar to *G. hedys*, longer, lateral carina of pronotum one-half longer than lateral basal carinula, abdomen without brown spots or bands, pygidium longer than broad.

Rostrum, head and antenna as in *G. hedys*, but segment III of antenna longer. On pronotum the dorsolateral rufous stripe separating dorsolateral vitta from white underside, longer, reaching close to fringe of apical margin ; basal lateral carinula horizontal, not slanting, lateral carina much shorter than in *G. hedys*, no distinct transverse carinula between dorsal carina and carinate basal margin.

Elytra nearly twice as long as broad (62 : 34), longer than in *G. hedys*, cylindrical, slightly flattened above, but not at all impressed in sutural area, none of the interspaces convex, a large area common to both elytra extends from basal margin to a little beyond middle of suture, here broadly truncate with an oblong projection on each elytrum, this lobe being nearly twice as long as broad and rounded behind, outer margin of creamy area running from above shoulder obliquely to fourth line of punctures and then curving gradually to fifth line which it reaches near end of lobe of creamy area, outline not sharply defined on account of the pubescence being somewhat longer than usual and not dense in creamy area, on vestigial subbasal swelling a narrow brown spot, if the spot were prolonged to suture it would form a V-mark with the spot of the other elytrum, no brown spot on suture in creamy area ; on apical declivous area a creamy A-shaped band from side to side, broadest at latero-apical margin and somewhat rounded at suture, apical margin with a very narrow diffuse creamy border, at

sides two spots, one below shoulder, the other before middle. Pygidium longer than broad (16 : 13), median stripe sharply defined, taken as a whole somewhat narrower than white border.

Underside pubescent white, pubescence not very dense, more concentrated in front of forecoxa, on mesepimerum, at apical margin of metasternite and dorsal margin of abdominal sterna I-III; anal sternum longer than preceding segment, rounded at apex.

Length 6.2, width 2.3 mm.

Brazil: Jatahy, Prov. Goyaz, 1 ♀.

Near *G. vitticollis* Jord. 1895.

#### 17. *Gymnognathus inea* sp. nov.

♀. Near *G. hilda* Jord. 1904; as in that species the pygidium entirely creamy white, broader than long, bidentate. Longer than *G. hilda*, dorso-lateral vitta of pronotum completely fused with white underside, basal lateral carinula rather strongly oblique.

Rostrum one-third broader than long, coarsely punctate-reticulate-rugate at brown sides, median carina thin, flattened near apical margin, a creamy-buff stripe occupies rather less than half the surface, forks on frons and curves down well behind eye, in centre of occiput a large brown triangular space extending on to frons, where it is diffuse, along middle of this triangular patch a few buffish scale-hairs. Antenna black, segment I rufous, III about as long as II, VIII as long as broad, club twice as long as broad.

Pronotum one-fifth broader than long, median vitta broad at base, strongly narrowing to apex, upper margin of white lateral area crossing dorsal carina at a distance longer than the basal lateral carinula, straight, slightly ascending, reaching apical margin a very little below the dorsal margin of the border of the eye, the brown stripe anteriorly a little narrower than behind middle, no trace of brown pubescence in the white lateral area; lateral carina entirely in this area, angle of carina 90°, lateral carinula slanting, forming an obtuse angle with dorsal carina and an acute one with cariniform basal margin. Scutellum white.

Elytra cylindrical, somewhat flattened above, but not depressed, two-thirds longer than broad, rather strongly punctate-striate, interspace a little convex, a large greyish area from base to apical third, not divided at suture, extending at base to lateral margin, but brownish above shoulder (apart from denuded shoulder-angle), on subbasal swelling a round brown spot, grey area gradually narrowed from shoulder to line IV of punctures which its outer margin reaches at basal third, at middle the area widens to interspace VII and the anterior angle of this dilatation is produced forward-sideward to join the antemedian lateral spot, posteriorly the area rounded between punctate lines III and VII and on suture triangularly enlarged backwards, at apex a pale primrose patch across suture, round in front, reaching laterally to apical margin of abdominal segment IV, sutural angles narrowly brown. Pygidium also pale primrose.

Thoracic sternites without brown spots, almost uniformly pubescent white, at sides a little creamy, on abdomen pubescence less dense, sides more or less brown, upper lateral margins of II to IV narrowly white. Legs brown, pubescent grey, segment I of tarsi longer than claw-segment.

Length 6.2, width 2.2 mm.

Highlands of Peru, 1 ♀.

18. *Gymnognathus lusia* sp. nov.

♀. A narrow species with short beak, trivittate pronotum, depressed elytra, bidentate pygidium, which is white and longer than broad. Near *G. vitticollis* Jord. 1895, but narrower, elytra more depressed, dorsolateral vitta of pronotum from upperside of lateral carina, pygidium longer and without brown median stripe.

Rostrum one-seventh broader than long, with strong median carina which does not reach apex, but extends as a much thinner carina to occiput, near base of rostrum a thin carina branches off each side, running to occiput; broad creamy-white median vitta forks on frons, the branches bordering eye, but remaining straight posteriorly, not bending down behind eye; no median vitta on occiput. Antenna rufescent, short, segment II half as long again as III, VIII as long as broad, club twice as long as broad.

Pronotum nearly as long as broad (23 : 25), three narrow vittae, broader at base, median one narrowing to a point at apex, dorsolateral one from upperside of lateral carina, but the white pubescence extending to basal margin and a little along dorsal carina, a short spur projecting forward from this border of dorsal carina above lateral angle; this angle about 90°, but strongly rounded, basal lateral carinula horizontal, subbasal transverse carinula very distinct except in middle. Scutellum white.

Elytra three-fifths longer than broad, moderately narrowing to beyond middle, then rounded, dorsally flattened, somewhat depressed behind subbasal swellings, none of the interspaces distinctly convex; a greyish white area from base to apical third, at base expanding to lateral margin, but shoulder angle more or less brown, on subbasal swelling a large brown spot, somewhat oblique, isolated, from behind this spot the outer margin of white area in interspace V, turning into VI behind middle, the area terminating in a point, being deeply sinuate across suture, the sinus rounded and the brown colouring extending in sutural interspace to before middle, from two-thirds of suture a white triangular patch extends obliquely backward to side, to which is joined each side of suture a largish apical spot, an antemedian lateral spot drawn out into a long line in punctate stripe VIII and parallel with this line another nearer margin commencing a little farther back, both lines more or less joining the lateral arm of the anteapical patch. Pygidium one-sixth longer than broad, medianly suffused with brown (discoloured?).

White pubescence of underside rather thin, condensed before anterior coxa, on mesepimerum, laterally at base and apex of metasternite and in a macular lateral stripe of abdomen. Femora and tibiae rufous, tarsi blackish.

Length 4.9, width 2.0 mm.

French Guiana: Pariacabo, ix. 1905, 1 ♀.

19. *Gymnognathus vanda* sp. nov.

♀. In markings near *G. lusia* (No. 18); but proboscis longer, dorsolateral vitta of pronotum across dorsal carina some distance above angle, pygidium brown, with triangular border at side, apex truncate, angles distinct but little produced, anal sternum also truncate, with the angles more produced; pattern of elytra nearly as in *G. dorsonotatus* Fährs. 1835, in which the pygidium is brown with white median stripe.



Proboscis less than one-tenth broader than long, apical half punctate, rest rugate-plicate, upper edge of antennal groove continued to eye as a thin earina, median carina prominent, not reaching apical margin, continued to occiput, but thin on head, creamy buff vitta divided by carina, continued to occiput each side, not bent down behind eye, no median vitta on occiput, frons irregularly plicate-earinulate. Antenna dark brown, rufous at base, III one-half longer than IV, VIII in ♂ twice as long as broad, in ♀ a little longer than broad, club in ♂ nearly thrice, in ♀ two and one-half times as long as broad, XI in ♂ longer than broad.

Pronotum as long as broad, three sharply defined creamy-white vittae, median one broadest, about half as wide before carina as brown interspace, dorsolateral one oblique, more or less thin, starting from dorsal carina well away from angle, but continued to basal margin, the space above lateral carinula being creamy white, no such pubescence along upperside of lateral carina, brown dorsal interspace narrowing towards apex, the dorsolateral one widening accordingly; angle of earina  $90^\circ$ , extreme tip rounded off, lateral carina less than double the length of basal lateral carinula, which is horizontal, subbasal transverse carinula distinct except in middle. Scutellum white, broader than long.

Elytra three- or four-fifths longer than broad, rather strongly narrowing posticad, flattened-depressed above, markings creamy white: three diffuse spots in depression above shoulder, more or less continuous with subsutural vitta, which commences at base at side of scutellum with diffuse pubescence, occupies interspaces I and part of II, widens behind brown subbasal swelling to punctate line IV, ending beyond middle in a point in interspace V, the dorsal margin of the patch starts from one-fourth (about) of suture and runs obliquely to meet its outer margin in interspace V, the patches of the two elytra, therefore, being separated from behind by a deep sinus, the edge of suture from apex of this bay to scutellum brown, from middle of suture to well before apical declivity an elongate-triangular spot posteriorly drawn out to interspace V or VI and either sinuate behind on suture (type) or straight, usually the edge of suture remaining brown within the spot, a spot on each elytrum close to suture a little longer than broad, before middle of side a small spot. Pygidium of ♂ as long as, in ♀ longer than broad, creamy-white lateral border narrow, ending in a point at middle of margin.

White pubescence of underside condensed into a conspicuous lateral creamy stripe on prosternite, a large patch occupying mesepimerum and base of metepisternum, a transverse lateral band at apex of metasternite, and a longitudinal lateral stripe on abdomen, these markings sharply contrasting with rest of underside, brown spot on metepisternum very large, extending down on to sternum. Legs thinly pubescent grey, femora and tibiae rufous, tarsi black.

Length 6.7–8.0, width 2.4–2.7 mm.

Amazonas: Pará, type (♀) in Carnegie Museum.

## 20. *Gymnognathus libussa* sp. nov.

♂. Near *G. randa* (No. 19), but dorsolateral vitta of pronotum broader, the angle of carina within the creamy-white pubescence, pygidium more strongly bidentate, anal sternum with the angles completely rounded off.

Pale rufous, antenna except base and tarsi brownish black. Rostrum as long as broad, side in front of eye with a few flattened ridges forming a few meshes, upper margin of antennal groove continued by a earina directed towards under-

side of eye, which it does not reach, median earina broad, flanked by a depression, the earina disappearing on occiput, median vitta divided by naked carina, forked on frons and the two halves directed backwards, not being bent down behind eye, no median vitta on occiput, frons plicate. Antenna nearly as in *G. vanda* ♀, VIII broader and XI shorter, club thrice as long as broad.

Dorsolateral vitta of pronotum from angle, its upper margin crossing dorsal carina, and its lower margin lateral carina, the vitta being as broad before carina as median vitta.

Creamy-grey dorsal area of elytra extending basally from margin to margin, not interrupted at shoulder and suture (apart from the somewhat denuded shoulder-angle), nearly encircling the large round brown spot on subbasal swelling, suture not brown from base to near middle, the area here dividing into a lobe on each elytrum which is continued to beyond middle, curved laterad-forward at end and nearly reaching the antemedian lateral spot, which consists of a marginal and a submarginal portion, before apical declivity a  $\Lambda$ -spot extending from suture obliquely to punctate line IV and being connected by a thin incomplete line (in interspace III) with an apical spot placed about midway between suture and lateral margin. Pygidium a little longer than broad, white lateral border continued to apex, tooth at angle quite distinct.

Pubescence of prosternite denser than in *G. vanda*, therefore sides not contrasting with middle, sides of rest of body as in *G. vanda*, more or less; anal sternum rounded-truncate, angles rounded off.

Length 6.7, width 2.3 mm.

French Guiana: Gourdonville, xi. 1905, 1 ♂.

#### 21. *Gymnognathus iphis* sp. nov.

♂♀. Similar to *G. vanda* (No. 19), but dorsolateral vitta anteriorly abbreviated, middle of prosternite sparsely pubescent, contrasting with sides.

Derm of upperside of head, anterior area of pronotum, base of antenna and femora more or less rufous. Base of rostrum at sides coarsely reticulate, no definite cariniform prolongation of upper edge of antennal groove. Rufous central area of occiput descending on to frons, large, occasionally with indication of a creamy-buff median spot, lateral vittae divergent, but not bent down to posterior margin of eye. Segment III of antenna at least half as long again as broad, club in ♀ nearly thrice, in ♂ narrower and thrice and one-half or nearly four times as long as broad, in ♂ XI longer than broad.

Dorsolateral vitta of pronotum from basal angle across angle of earina obliquely directed towards vitta of occiput, but somewhat curved and not reaching apical margin.

Creamy-white dorsal area of elytra reaching at base from shoulder to shoulder, the marginal spot below shoulder being separated from it, on subbasal swelling a large brown spot, completely enclosed, longer than broad, oblique, broadest anteriorly, incurved on side towards scutellum, the area reaching on each elytrum to two-thirds, ends of the two lobes rounded and more or less curved sideward to punctate line VI, in one specimen here connected with antemedian lateral spot by an oblique line, from behind subbasal swelling to posterior sideward curve the outer margin of the area on or at punctate line V, as in *G. vanda* a triangular creamy-white patch before apical declivity, broader, extending posteriorly to line VI of punctures, not connected with apical spot, in one speci-

men anteriorly a connection across interspace II with creamy-white area; the brown A-band behind the creamy-white area anteriorly restricted to sutural interspace and here continued forward to basal third as a sharply defined line. Pygidium brown, in ♂ practically as long as broad, in ♀ one-fourth (approximately) longer than broad, angles produced as sharp teeth.

Underside much more densely pubescent white laterally than ventrally, brown spot of metepisternum sharply defined, not extended on to metasternum. Anal sternum shorter in ♂ than in ♀, a little flattened in ♂, apex truncate-rotundate, without indication of angles, white lateral stripe of abdomen conspicuous.

Length 6.6–9.7, width 2.4–3.7 mm.

Costa Rica, 28. vi. 05 (F. Nevermann), on dead wood, a series, type in coll. Nevermann.

## 22. *Gymnognathus moranus* sp. nov.

♂♀. Closely related to *G. daguanus* Jord. 1897, of which it probably is the Central American representative. As in that species with a notch at side of rostrum bearing a brush, which is vestigial in small specimens. Dorsolateral vitta of pronotum very narrow, incomplete, white lateral stripe of abdomen broad on anterior segments, narrowing behind.

Derm of upperside of head not brighter rufous than on rest of upperside, whereas in *G. daguanus* the colours contrast. Fringe of apical margin of pronotum entirely creamy white in *G. daguanus*, in *G. moranus* brown except in centre; from lateral angle of carina a shallow, broadish, depression runs obliquely dorsad-apicad in *G. daguanus* filled in with sparse white pubescence forming a somewhat bent broad vitta, which, if it were prolonged, would reach middle vitta some distance from apex; this depression absent in the new species, and the dorsolateral vitta is very thin and starts from or from before dorsal carina well above angle, the lateral carina being thinly bordered with white, the dorsolateral vitta strongly abbreviated, reaching beyond middle, its apex cut off as a spot; if this vitta were prolonged it would reach apical margin some distance from median vitta.

Lateral stripe of prosternite more horizontal than in *G. daguanus*; metepisternum brown, its ventral margin bordered with white, this border very broad in front, gradually being reduced, metepimerum also brown, metasternum with narrow white apical border laterally; in *G. daguanus*, on the other hand, the metepisternum is densely pubescent (yellow in our specimens, discoloured?), only the median third being brown, and the posterior patch extends broadly on to metasternum; abdomen with conspicuous continuous lateral stripe in *G. moranus*, broad on segments I and II, narrower on III, on IV a small isolated spot, which is often absent. Femora and proximal half (more or less) of tibiae rufous, apex of tibiae and tarsi blackish; foretibia of ♂ with carina on inner side.

Length 6.1–9.1, width 1.8–3.3 mm.

Costa Rica, ii, iii, iv, vi, vii, viii, xi (F. Nevermann), on dead wood, a series, type in coll. Nevermann.

## 23. *Gymnognathus nica* sp. nov.

♂. Head with deep ovate groove; pygidium more than half as long again as broad, uniformly creamy white excepting denuded brown median line, apex

evenly rounded. A robust species near *G. molitor* Jord. 1895, but narrower. Rostrum as long as broad, the creamy-buff pubescence extending to near the sides, basal half longitudinally plicate; median carina divided on frons to form the margins of the deep ovate groove of head, sides of head creamy buff. Eye longer than broad. Antenna reaching to base of prothorax, slender, segment III more than twice as long as II, one-third longer than IV, V to VIII much shorter than III, but longer than usual, VIII somewhat widened, as long as II, club more than thrice as long as broad, as long as III, X a little broader than long.

Pronotum conical, a trifle shorter than broad, median vitta broad, in a rather deep depression, dorsolateral vitta likewise broad, somewhat irregular, starting from underside across lateral carina, which is entirely within the creamy-buff pubescence; this vitta extends to basal angle, but there is a small brown spot in the angle of the carina; from the base of this vitta projects a short broad intermediate vitta, which ends nearly on a level with lateral carina; dorsal carina incurved in median depression, laterally slightly convex, lateral carina a little slanting, nearly reaching halfway to apical margin, the angle completely rounded off, but not quite a half-circle, tip of lateral carina curved upwards; fringe of apical margin creamy buff from eye to eye.

Elytra narrowing towards apex, two-thirds longer than broad, flattened, with a depression in sutural area to interspace III, which is convex, the greater part of elytra occupied by creamy-buff pubescence, extending from base to apex on suture without interruption, but trisinate laterally; it expands at base from side to side, enclosing a naked shoulder spot and on subbasal swelling a short irregularly oblong spot, 2 mm. from base the area almost suddenly narrows to fourth line of punctures, nearly 2 mm. farther back it expands to interspace VII; this expansion terminates irregularly, the brown colouring penetrating forward into the creamy-buff area as a narrow bay to second interspace (not to suture in the unique specimen), between this bay and apex the creamy-buff area expands twice, first in front of apical declivity to interspace IV, and then at apex to punctate line VII, in between, on the anteapical convex area, the brown colouring penetrating as a rounded bay to line II of punctures; at side an elongate median patch imperfectly separated in interspace VII from dorsal area, a smaller elongate spot above abdominal segment III and apex of II, brown area connected also with shoulder spot by a narrow streak.

Underside: pubescence thin anteriorly in middle of prosternum, laterally from meral suture to apex, on metasternum and in middle of metepisternum, as well as an abdomen excepting a densely pubescent lateral stripe; anal sternum longer than preceding segment, strongly narrowing apicad, but apex truncate-emarginate with the angles completely rounded off.

Length 12.0, width 4.3 mm.

Brazil: Bahia, 1 ♂.

## 24. *Gymnognathus signatus* Gyllenhal 1833.

Though we have no example which exactly matches the specimen on which this name was based, I have very little doubt that it belongs to the species which I described in 1904 as *G. blanca*. However, it is to some extent intermediate between *G. blanca* and *G. ada* Jord. 1904 and may represent a distinct species. It was obtained by Freyreiss, who also collected *Phaenithon moerosus* Bohem.



1833, a species of which I have likewise seen no other specimen than the type, a fact suggesting that no further material has come from that particular locality.

The specimen is a small ♂, somewhat broader than examples of *G. ada* and *G. blanca* of the same length. The two rather strong lateral carinae of frons of head converge forward, joining median carina at base of rostrum, as is often the case in the allied species; broad creamy-white median stripe of rostrum and head apparently tripartite on occiput (which is retracted into pronotum). Pronotum with the following creamy-white vittae: a median one broad from base to near middle, then gradually narrowing, occupying at base more than one-fourth the post-carinal area and being at apical margin about one-third as broad as posteriorly, from apex of lateral carina forward a stripe more thinly pubescent white, the colour of the derm showing through, this stripe bounding a lateral vitta which posteriorly is united with the creamy underside, the lateral carina within this lateral vitta, lateral portion of post-carinal area creamy white, from this patch a narrow vitta runs oblique forward halfway to apex, continued to near apical margin by a less densely pubescent stripe; on the brown interspaces some dispersed scale-hairs and along dorsal carina some pubescence likewise creamy white; basal lateral longitudinal carinula more oblique than in the allied species.

Elytra for the greater part creamy white: base from shoulder to shoulder, the shoulder-angle remaining brown, the white area extending on suture to apex, narrow in front of antemedian depression on account of brown patch on subbasal swelling, then widening, extending farther laterad in middle and here running forward as a narrow irregular band to basal third of margin, before middle of suture an oblong brown spot, behind middle the sutural area restricted to interspace I, widening before apical declivity into a somewhat sinuous transverse, narrow band which does not quite reach lateral margin, then again restricted to interspace I and at apical margin dilated sideward; the brown spot on subbasal swelling laterally united with brown antemedian lateral area; the posterior margin of creamy-white anterior half of each elytrum bisinuate. Pygidium creamy white, pubescence less dense in middle (worn off), without the white median line of *G. ada*, tooth long and sharp (that of left side missing).

Underside densely creamy white, a spot on metepisternum and a diffuse, partly denuded, sublateral stripe on abdomen brown, lateral creamy-white stripe of abdomen as in *G. blanca*, not divided into definite spots as it is in *G. ada*. Derm of legs rufescent, tip of tibiae and tarsi blackish brown.

Length 5.7, width 2.3 mm.

"Brasilia. Dom. Freyreiss"; see *Phaenithon moerosus*, p. 255, No 58.

## 25. *Gymnognathus lotus* sp. nov.

♂♀. Like *G. dorsonotatus* Fahrs. 1839, but in that species—which we have from Eastern Brazil and the Lower Amazons—the white lateral stripe of the prosteronite is medianly less densely pubescent, being longitudinally divided into two white stripes, of which one is entirely ventral and the other crosses the lateral carina, being dorsolateral, its upper margin crossing carina at angle. In the new species the white stripe is not divided and is wholly ventral, there being no white pubescence at the dorsal side of the lateral carina or only traces of it.

Upper Amazons (type), Bolivia and French Guiana.

26. *Gymnognathus regalis* sp. nov.

♂♀. Dorsolateral vitta of pronotum complete, but thin; brown spot on subbasal swelling of elytrum large, connected across suture with that of other elytrum, the brown colouring extending on suture to apex; pygidium bidentate, with white median vitta as in *G. lotus* and near allies.

Rostrum one-fifth longer than broad, median carina broad, not reaching apical margin and disappearing on occiput; a white vitta divided by carina, continued as narrow border to eye, slightly bent down on occiput. Antenna dark brown, equalling in length the distance of apical margin of rostrum from hindmargin of eye in ♂, a little shorter in ♀, segment III somewhat longer than II and IV, V to VIII gradually shorter, VIII as long as broad, club somewhat longer than V to VIII together. Eye oblong.

Pronotum about one-tenth broader than long, with shallow depression along middle as usual, widened at carina, three white vittae, median one broadest, dorsolateral one thin, arising well above angle of carina, but continued to base and here widened to side, there remaining a brown spot in angle between dorsal carina and lateral carinula, a thin border of grey pubescence from vitta to angle and along lateral carina; angle of carina a little over 90°, tip rounded off, lateral carina not reaching halfway to apex (measured from angle, not from base), lateral carinula the same direction as lateral carina in ♂, horizontal in ♀.

Elytra a little more than half as long again as broad, flattened-depressed above, narrowing posteriorly as in the allied species *G. dorsonotatus* Fährs, 1839 and *G. decorus* Perroud 1853; the white decorations of the elytra appearing greyish, the colour of the derm showing through; they consist of a sort of ribbon running from scutellum and suture behind it along basal margin to supra-humeral depression, curving round subbasal swelling obliquely to interspace II, occupying II and a little of III for a short distance and turning obliquely across III, IV and V to VI, ending here at apical fourth, the sutural interspace from behind base to apex without white pubescence, before apical declivity a Λ-mark from line III of punctures, interrupted at suture; apex with a rather deep impression bearing a small spot; no lateral spots. Pygidium as long as broad, bidentate, with narrow white median stripe angustate towards apex.

Mesosternal process not nearly reaching the level of the metasternum, truncate, broad, the metasternal intercoxal process bent down anteriorly; metepisternum with large brown patch; on abdomen a white lateral band, anal sternum truncate, somewhat longer than previous segment in both sexes. Derm rufous on femora, blackish on tibiae and tarsi.

Length 7.6-9.0, width 3.1-3.6 mm.

Brazil: São Paulo, 1 ♂, type; French Guiana: Pariacabo, xii.1905, 1 ♀.

27. *Gymnognathus pentilus* sp. nov.

♂. Closely related to *G. regalis*, but differing in the markings of the elytra and in the mesosternal intercoxal process.

Head and proboscis as in *G. regalis*, but the groove at side of proboscis between antennal groove and eye deeper. Segments III and XI of antenna somewhat longer, club more than four times as long as broad, X a little broader than long, XI one-fourth longer than broad, its apex rounded.

Dorsolateral vitta of pronotum broader than in *G. regalis* and the area above

lateral carinula entirely pubescent white, without brown spot behind dorsal carina. Scutellum white.

Elytra as deeply depressed as in *G. regalis*, a white basal band from side to side across scutellum and extending from basal margin a little behind scutellum, the shoulder angle remaining brown, on suture the band not interrupted, but the white pubescence continued as a narrow sutural stripe to one-third the length of elytra, here the stripe divided into two, which turn nearly at a right angle to third line of punctures, run in interspaces III and IV and then obliquely across V (which is the highest point of elytrum) to line VI of punctures, terminating just beyond two-thirds from base, from two-thirds of suture a thin line runs obliquely to apical declivity terminating at line VI of punctures, the lines of the two elytra forming a long A-mark, apical area less swollen than in *G. regalis*, without impression and without white spot, at side an antemedian white stripe. Whereas in *G. regalis* the large subbasal brown spots of elytra are joined together across suture and separated from brown lateral area, they are, in the present species, broadly merged with the lateral area and separated from each other. Pygidium a trifle longer than in *G. regalis*.

Mesosternal intercoxal process reaching close to the level of the metasternum, narrower than in *G. regalis*, with the apex rounded, the intercoxal process of metasternum divided by a deep median furrow.

French Guiana : Nouveau Chanier, xi, 1 ♂.

#### 29. *Gymnognathus ophiopsis* Dalman 1833.

Syn. : *G. femoralis* Jord., *Nov. Zool.*, iv, p. 175 (1897) (Colombia).

The type of *G. ophiopsis* is a large ♂, much larger than any of the four examples described by me as *G. femoralis* from the Rio Dagua in West Colombia. The specimen has all the characteristics of *G. femoralis*, but differs somewhat in the colour of the elytra. The sutural area is clay-colour instead of more or less greyish white shaded with clay-colour. The most characteristic feature of the species is the great length of the lateral pronotal carina. The dorsolateral vitta of the pronotum is represented by a few spots. Of the white spots of the elytra mentioned by Dalman, three are marginal and two dorsal, these latter being the tips of the projections of the sutural area, one before and the other behind the sinus which penetrates from the brown area obliquely forward into the grey or luteous sutural area.

There are several Remedios in South America, but the place well known a hundred years ago was Remedios in Colombia, at that time of importance on account of its goldfields, now exhausted.

#### 30. *Gymnognathus procerus* sp. nov.

♂♀. Similar to *G. dorsonotatus* Fährs. 1839, which we have only from S.E. Brazil, whereas our series of *G. procerus* is from the Amazons and French Guiana. Differs especially in the pattern. End-segment of antenna somewhat longer. Rostrum and prothorax of large specimens likewise longer. None of the markings vermilion, all greyish white. Vitta of rostrum separated on head into two straight stripes which are narrower on occiput than the brown interspace. Median vitta of pronotum narrow. On elytra the sinus running obliquely forward into grey sutural area from brown lateral area usually reaching brown sutural spot, a grey

triangle being separated from anterior grey sutural area. In ♀ anal sternum shorter than in *G. dorsonotatus*.

Amazonas, type, and French Guiana, a series ; in Carnegie Museum from Pará.

### 31. *Gymnognathus aulicus* sp. nov.

♂. Near *G. fahraei* Schönh. 1839 ; as in that species upperside white with black spots ; narrower than *G. fahraei*, scutellum white, elytra without sutural spot in posterior half, abdomen with white lateral stripe from segment III instead of from or from near base, antenna longer, club narrower, puncturation of underside very sparse and the punctures smaller than in *G. fahraei*.

Antenna rufescent brown, segment III longer than II, VIII more than twice and club more than thrice as long as broad, IX as long as XI, twice longer than X, this shorter than VIII. Frons with a rather prominent carina midway between median carina and eye, extending on to base of rostrum, slightly curved sideways at both ends, as in *G. leucomelas* Jord. 1904. Pronotum somewhat longer than in *G. fahraei*, less impressed before carina, which is less concave in middle, lateral angle of carina less broadly rounded, lateral carina almost horizontal, on disc each side of middle a tear-shaped black spot narrowing forward, not reaching apical margin, the two spots anteriorly nearly parallel, posteriorly divergent ; behind carina a black spot each side of middle, not extending across carina, but continued along basal margin to lateral angle. Scutellum white.

Elytra more strongly punctate-striate than in *G. fahraei*, much less depressed at suture, interstice V not subcariniform ; an elliptical spot in middle of suture and each elytrum with five additional spots black : one at shoulder, a circular one on subbasal swelling, a smaller round spot obliquely behind it between lines V and VII, a large postmedian patch widest at side, extending to line II, where it is rounded off, at sides broadly confluent with a subapical spot which extends dorsally to line II. Pygidium longer and narrower than in *G. fahraei*, with almost parallel sides, apex rounded-truncate.

Derm of underside and legs more or less rufescent ; metasternite with transverse lateral band and abdomen from III to V with a lateral stripe, II of abdomen with a white dot. A patch on upperside of hindfemur and greater part of tibiae also white. Intercoxal process of mesosternum narrower than in *G. fahraei* and much less concave.

Length 6.6, width 3.1 mm.

Brazil, one ancient, damaged, ♂ from coll. Dejean via coll. Roelofs.

### 32. *Gymnognathus biloris* sp. nov.

♀. Upper- and underside white and buff-yellow, elytrum with postmedian lateral brown-black patch which is dorsally continued forward to the punctate line II as a thin stripe which widens at end, the mark not unlike a hen without legs. Nearest to *G. leucomelas* Jord. 1904.

Rostrum longer than broad, with white median stripe accompanied by a buff-yellow one, in front of eye an almost bare stripe and below eye a buff-yellow one ; median carina prominent as in the allied species, on frons about halfway to eye a smaller one as in *G. leucomelas* and *G. aulicus* ; vittae of rostrum continued over the frons ; occiput without black spot. Antenna rufescent, III much longer



than II, VIII about as long as broad, club similar to that of *G. fahraei* in the length of the segments, but much narrower, IX twice X, XI shorter than IX, but longer than X.

Pronotum as in *G. leucomelas*, one-fourth broader than long, deeply depressed before carina, which is medianly as strongly concave as in *G. leucomelas* and laterally rather more convex than in that species, lateral angle less widely rounded, lateral carina reaching to middle, disc less densely pubescent than sides, without black spots, a dorsolateral stripe in white area and the borders of this area buff-yellow. Scutellum pale buff-yellow.

Elytra more than half as long again as broad, strongly depressed at suture, interstice III convex, punctate stripes distinct, declivous apex with swelling, stripe I and alternate ones buff-yellow, the others white, before apical rounding of margin a large brown-black patch, at side about as long as its distance from apical angle of suture, the patch more strongly narrowing in front than behind, turning forward in interspace III, running forward along line II for a short distance and then curving towards suture, abruptly ending at line I, the longitudinal diameter of the head of the line being about twice the diameter of interstice II; between suture and apical swelling a minute brown dash. Pygidium one-fifth longer than broad, buff-yellow, with white median stripe, apex round.

Prosternite silky, pubescence not very dense, the derm showing through, no puncturation. Intercostal process of mesosternum gradually narrowed-rounded slightly convex in apical half; sides of thorax with yellowish clouds; abdomen almost bare ventrally, at side a stripe of five contiguous spots, each buff-yellow in front and to a smaller extent white behind. Femora and tibiae white, on upper-side buff-yellow, tarsi and apex of tibiae brownish black.

Length 8.0, width 3.7 mm.

Brazil: Bahia, 1 ♀.

### 33. *Gymnognathus doris* sp. nov.

♀. Near *G. tenuis* Jord. 1895, but pattern of elytra almost as in *G. lyrestes* sp. nov., No. 12.

Rostrum less depressed in middle, as in *G. tenuis* with a creamy median vitta, somewhat narrowing on occiput and continued to base of pronotum, no lateral vittae on occiput. Antenna pitchy black, short. On pronotum an oblique vitta from upperside of lateral carina, expanding from apex of carina to angle, no white pubescence in angle and very little at base above oblique lateral carinula; angle of carina 90°. Elytra with sutural depression; a grey basal marginal band, interrupted at shoulder, continued on suture to subbasal depression, turning a little sideways and occupying at first interstice II, then II and III and at two-fifths turning sideward-forward and running as a narrow band to margin, which it reaches above apex of metepimerum; at apex parallel with suture but separate from it a straight stripe about as broad as two interstices and not quite three times as long as broad. Pygidium white, with brown median stripe which does not reach apex, apical margin rounded.

Underside thinly pubescent white; on prosternum a white stripe from coxa to below eye; mesepimerum, base and apex of metepisternum, apical margin and metepimerum, and a lateral stripe on segments I to IV of abdomen densely

pubescent white; derm of tibiae and tarsi blackish, of femora rufous; anal sternum strongly bidentate.

Length 4.5–6.0, width 1.8–2.3 mm.

Amazonas, 2 ♀♀, type (the larger specimen) in Riksmuseum, Stockholm.

### 34. *Gymnognathus pulchellus* sp. nov.

♀. Rostrum and lateral earina of pronotum as short as in *G. hilda* Jord. 1904, to which the species comes nearest, though the pattern of the elytra is very different. Pygidium bidentate, white, with brown tear-shaped median spot divided by a thin white median line.

Rufous to rufescent brown. Rostrum with creamy-white double vitta which separates on head, forming borders to the eyes and bounded by a thin carinula; sides of rostrum coarsely rugate-punctate. Antenna short, XI broader than long. Pronotum with three complete white vittae, median one broad at base and in front of carina, narrowing rather abruptly and then gradually, pointed, dorsolateral vitta about half the width of posterior portion of median one, remaining of the same width to apex, the rufescent-brown stripe separating it from white underside reaches close to dorsal carina, but does not touch it; lateral carinula horizontal (in *G. hilda* distinctly oblique), as long as lateral carina. Scutellum white.

Elytra cylindrical, not depressed at suture, subbasal swelling very faintly indicated, lines of punctures distinct, but feebly impressed, a basal marginal band interrupted at shoulder, nearly straight behind; suture narrowly brown from scutellum to apex; from behind subbasal swelling a white stripe along suture to beyond middle, curving sideward-forward and reaching lateral margin above apex of metepimerum, the anterior end of this curved band slightly widened, extending to line III or nearly IV of punctures and on the frontal side feebly emarginate, a straight rufescent-brown transverse band separating it from the white basal band, the transverse portion of the curved band a little wider than an interstee; at apex an elongate bandlike white spot from near outer margin above abdominal segment IV to near suture, curving upwards, not touching apical margin. Pygidium broader than long, apical teeth very distinct.

Underside white; on segments I and V of abdomen a rufous spot.

Length 4.0–4.3, width 1.9–2.0 mm.

Amazonas, 2 ♀♀, type in Riksmuseum, Stockholm.

## SECTION II.—PRONOTUM LONGITUDINALLY PLICATE, AT LEAST IN MIDDLE BEFORE CARINA.—SPECIES 35–38.

### 35. *Gymnognathus phanerus* sp. nov.

♂♀. Near *G. flexuosus* Jord. 1895; antennae broader, in ♀ very strongly compressed from segment III; prothorax with white band from coxa to apical margin of pronotum behind eye; anguliform white line of elytrum not connected with basal white area.

Shaft of antenna not cylindrical, but as flat as club, in ♂ (where the antenna reaches to apical third of elytra or beyond) segment IV in long antenna thrice, in shorter antenna a little over twice as long as broad, club not much broader than shaft, particularly in ♀, in ♀ IV one-fourth longer than broad.

Pronotum longer than in *G. flexuosus*, lateral carina also longer and more slanting, the angle being larger, dorsolateral vitta not quite reaching apical margin. Basal margin of elytrum less strongly curved forward, no white sutural stripe connecting the anguliform arcs with each other and with basal area. Median areas of underside less densely pubescent; abdominal segment I entirely brown at side, II to IV with white transverse basal band widest at side. Pygidium of ♀ longer and apically narrower than in ♀ of *G. flexuosus*.

Amazonas (Dr. Hahnel), 2 ♂♂ (type); Cayenne, 1 ♀; Cochabamba, Bolivia, 1 ♀; in Carnegie Museum from Chapada, Brazil, Pará, Santarem and S. Paulo de Olivença.

### 36. *Gymnognathus talis* sp. nov.

♀. Near *G. helena* Jord. 1904, but head and disc of pronotum coarsely reticulate; white borders of pygidium narrow.

Rostrum half as broad again as long, with broad yellowish buff vitta which forks on frons, no median stripe or spot on occiput; median carina of rostrum from apex, not extending across frons, which is entirely reticulate like occiput. Antenna short, III a little longer than II, I and II and club paler than III to VIII, XI broader than IX.

Pronotum convex, feebly depressed at carina, disc between dorsolateral vittae and from carina to apical fifth reticulate, the meshes more or less longitudinal, no straight isolated ridges; median vitta narrowing to a point at apex, dorsolateral vitta broader, running from basal angle to border of eye; angle of carina a little over 90°, with the tip rounded off, basal longitudinal carinula in the same direction and half the length of the lateral carina, forming an acute angle with dorsal carina.

Elytra half as long again as broad, strongly flattened-depressed, interspace V convex in posterior half, basal margin strongly curved forward; a greyish white basal area from side to side, interrupted on shoulder, extending on suture to basal fourth, here forked, the lobe on each elytrum reaching to middle, indistinctly bounded by interspace V, rounded at end, the brown bay on suture rounded off, before apical declivity a triangular sutural patch, its apex on suture rounded, the lateral angle produced sideways in the direction of the postmedian lateral spot, at apex an elongate creamy-buff spot separated from suture, at sides an antemedian greyish spot, a postmedian spot narrow, oblique, yellowish. Pygidium as long as broad, truncate-rotundate, the angles completely rounded, lateral border creamy buff, narrow, of even width, not sharply defined.

Pubescence of underside thin, silky, concentrated only on mesepimerum, apical margin of sides of metasternite, and at sides of abdominal segments II to IV, these segments with brown apical lateral spot, anal sternum truncate-rotundate, angles completely rounded.

Length 6.7, width 3.1 mm.

French Guiana: Gourdonville, xi. 1905, 1 ♀.

### 37. *Gymnognathus elisa* sp. nov.

♂♀. Occiput with creamy pubescence in centre; dorsolateral vitta of pronotum not separated from white area of underside, the pronotum being creamy white with two broad, sharply defined, brown stripes which widen a little at apical margin; before apical declivity of elytra a triangular spot on suture,

connected on suture with creamy-white sutural area or isolated. Near *G. erua* Jord. 1904 and *G. abundans* Jord. 1906.

Rostrum as in the allied species; occiput without definite brown median area, but with more or less scattered creamy pubescence. Antenna of ♂ reaching to base of prothorax, rufous, club darker, shaft compressed, III slightly longer than II and IV, VIII not quite twice as long as broad; antenna of ♀ shorter, varying from rufous to black, shaft thicker than in the allied species, but much less compressed and narrower than in ♂.

Pronotum rugate-plicate, more regularly plicate in front of carina, only one-ninth broader than long; median vitta more or less narrowed towards apex, at carina about as broad as the brown stripes, these anteriorly slightly wider on account of the narrowing of the median vitta, lateral margin of brown stripe horizontal, the stripe, therefore, continuous with the post-ocular brown area of head; dorsolateral vitta completely fused with white underside from base to apex, but of a slightly buffish tint; angle of carina a little over 90°, tip rounded off, basal carinula horizontal, longer than half the lateral carina, transverse subbasal carinula barely vestigial.

Elytra more distinctly flattened above than in the nearest allies, longer, being five-eighths longer than broad, basal margin strongly curved forward, a large creamy-white dorsal area from base to apical third or fourth, reaching at base to lateral margin, the shoulder angle remaining brown and being isolated or connected with the brown lateral area, on subbasal swelling a round isolated spot, the white area narrowed gradually from shoulder to line IV of punctures before middle and then gradually widened to reach interspace V, posteriorly the area more or less rounded on each elytrum and more or less deeply excised upon suture, behind it a sutural spot of variable size, in type connected on suture with creamy-white area, at apex a largish spot on each elytrum more or less rounded, at lateral margin an antemedian spot, no postmedian one. Pygidium in ♂ as long as broad, in ♀ a little longer, truncate, with the angles strongly rounded.

Underside white, no definite brown lateral spots except on abdominal sternum I, a lateral stripe on abdomen more densely pubescent than underside of abdomen, apex of anal sternum truncate-rotundate; femora and tibiae rufous, tarsi blackish.

Length 5.2–5.6, width 2.1–2.2 mm.

Brazil: Espirito Santo, type; Santa Catharina; a short series.

### 38. *Gymnognathus pindonis* sp. nov.

♂♀. In the markings of the elytra similar to *G. vicinus* Jekel 1857, but pronotum coriaceous, rugulose on disc, plicate in middle before carina, dorsolateral vitta well away from lateral carina, no short intermediate vitta. Nearest to *G. ampulla* Jord. 1906, which has no dorsolateral vitta on pronotum and no transverse band or triangular spot before apical declivity of elytra.

Rostrum as long as apically broad, median carina not reaching apex, creamy-buff stripe broadly divided along middle, the two halves narrower on frons, bordering eye and on occiput curved downward for a short distance; no buff median spot on occiput. Antenna black, in ♂ reaching to or beyond base of prothorax, in ♂ III more than twice II in length, not quite twice IV, III elongate-triangular, half the length of III, twice as long as apically broad, XI longer than



broad; in ♀ antenna III three-fourths longer than II and about one-fourth longer than IV, VIII as long as VII, but broader, not longer than broad, XI broader than long.

Pronotum at most one-eighth broader than long, coriaceous at sides, rugate-reticulate on disc, plicate medianly in front of carina, three well-defined vittae, median one occupying behind carina about one-fifth of the basal area, narrowing frontad, dorsolateral one crossing dorsal carina at some distance from angle, narrow, joining the dorsal border of eye, behind dorsal carina above lateral carinula a brown spot, angle of carina  $90^\circ$ , extreme apex rounded off, direction of lateral carinula the same as that of lateral carina, subbasal transverse carinula distinct at side. Scutellum white, broader than long.

Elytra twice as long as pronotum, narrowing posticad, flattened above, distinctly depressed transversely behind subbasal swelling, seriated punctures very distinct, interspaces flat, a basal band from side to side interrupted at shoulder, almost straight behind, subbasal swelling with large rounded brown spot broadly joined to lateral brown area, upon it follows (on each elytrum) an elongate trapeziform patch from suture to or beyond line IV of punctures, its lateral margin straight, very slightly slanting, the patch terminating in interspace V, its inner margin also straight, but slanting from suture to end, the pointed bay between the patches of the two elytra penetrating more forward on suture in some specimens than in others, sometimes the two patches practically separated, as a rule a thin sutural line connecting the double patch with the basal band, before apical declivity a triangle pointing forward, straight posteriorly, the lateral angles more or less drawn out as a transverse band, which sometimes reaches lateral margin, the triangle more or less divided by a thin brown line on suture, at apex, separate from suture, an elongate-ovate longitudinal spot, before middle of side a small spot. Pygidium truncate, angles not prominent, at each side a narrow creamy border tapering to a point, in ♂ length equalling basal width, in ♀ surpassing it.

Pubescence of underside thin, condensed at side, forming a large patch on mesepimerum and base of metasternite, a transverse lateral band at end of metasternite and a macular longitudinal band on abdomen; brown spot on metepisternum very large and continued on to sternum; anal sternum truncate, in ♂ the angles drawn out into a short tooth.

Length 6.1–7.3, width 2.4–2.8 mm.

French Guiana: Roches de Kourou and Pariacabo, 3 ♂♂, 1 ♀, received from M. E. Le Moul't.

#### KEY TO THE SPECIES OF *GYMNOGNATHUS*.

**Section I.**—No longitudinal wrinkles on pronotum; disc minutely coriaceous or rugulose, the granules often united in minute transverse ridges.—Section II, p. 239.

An attempt to group the numerous species of this Section primarily according to the development of the apex of the pygidium and fifth abdominal sternum proved to be a failure, there being all intergradations between a bidentate and an entire apex. Considering that the number of undescribed and undiscovered species is evidently very large, the Key can only be provisional, more a help to the taxonomist in the determination of species than a classification. I have.

therefore, largely made use of the style of coloration which characterizes various assemblages of species.

*Subsection A.*—Derm of head or of apex of pronotum or of both rufous red, pronotum with one or two transverse grey, white or yellowish, usually abbreviated, bands, or with indications of such, no longitudinal dorsolateral vitta of that colour, or with five vittae, elytra usually striped with grey, or these stripes confined to basal area and rest of elytra brown, or elytra entirely brown.—Species 1–16.

*Subsection B.*—Occiput and sides of apex of pronotum with orange-red pubescence.—Species 17 and 18.

*Subsection C.*—Markings grey or white, sometimes pubescence red on rostrum, apex of elytra, pygidium and side of under surface; derm of occiput and pronotum rufous red, pronotum with greyish white oblique dorsolateral vitta.—Species 19–59.

#### SUBSECTION A.

*Group a.*—Pygidium with white or creamy lateral border, which is sometimes strongly reduced, the pygidium then being almost completely brown.—Species 1–8.

1. Pronotum with five white vittae besides some lateral spots. Pygidium with yellowish lateral border and white median stripe; apex of pygidium and anal sternum bidentate . . . . . 1. *G. bohlsi* Jord. 1895.  
Pronotum not quinquevittate, some markings transverse . . . . . 2.
2. Apex of both pygidium and anal sternum completely rounded  
2. *G. cincticollis* Jord. 1895.  
One or the other, or both, truncate, with the angles distinct, or at least indicated . . . . . 3.
3. Anal sternum with two long sharp spiniform teeth; median vitta of pronotum reaching to apical margin . . . . . 3. *G. robustus* Jord. 1895.  
Angles of anal sternum not produced into long teeth . . . . . 4.
4. Pronotum with transverse band in front of dorsal carina not interrupted . . . . . 5.  
This band interrupted, not joining the median vitta . . . . . 7.
5. Abdomen with white isolated lateral spots; frons and rostrum tricarinate, median carina broad, lateral one narrow on frons, flattened on rostrum . . . . . 4. *G. heterus* Jord., p. 213.  
Abdomen almost entirely white, at least the white pubescence of side not isolated as spots . . . . . 6.
6. Frons and rostrum with thin mesal carina, frons, besides, with a number of longitudinal wrinkles; basal longitudinal carinula of pronotum horizontal; white border of pygidium about as broad as brown median stripe. Head of ♂ with central ovate groove. On underside of prothorax a transverse band running obliquely backward and continuous with border of dorsal carina . . . . . 5. *G. emma* Jord. 1904.  
Basal longitudinal carinula oblique; white border of pygidium narrow; sutural area of elytra for the greater part diffusely grey from base to apical declivity, yellowish at base; no oblique transverse band on prosternite; before dorsal carina a dorsolateral triangular grey spot, median vitta nearly reaching apical margin . . . . . 6. *G. calus* Jord. 1906.

7. Elytra with thin transverse line behind middle, curving backward at side, reappearing before apical margin and running forward at suture ; grey basal lateral patch of pronotum enclosing before dorsal carina a brown spot . . . . . 7. *G. pulcher* Jord. 1906.

Elytra without that thin transverse line ; no brown spot before carina in basal patch ; on head a deep central groove (♂)

8. *G. helma* Jord., p. 213.

*Group b.*—Pygidium brown, with white or yellowish median stripe.—

Species 9–16.

8. Anal sternum as well as pygidium bidentate . . . . . 9.

Anal sternum with the angles rounded ; head of ♂ with central groove (probably in all the species, of some only ♀ known). . . . . 12.

9. Basal longitudinal carinula almost horizontal, angle of carina very strongly rounded ; median vitta of pronotum complete

9. *G. ornatus* Jord. 1895.

Basal longitudinal carinula strongly oblique, forming an obtuse angle with lateral carina as well as dorsal one, angle of carina 90° or less, not rounded . . . . . 10.

10. Elytra with hardly any white markings 10. *G. scolytinus* Jord. 1904.

Elytra striped with white or buff . . . . . 11.

11. Median vitta of pronotum extending to apex, not connected in middle with lateral abbreviated vitta . . . 11. *G. comptus* Jord. 1904.

A transverse submedian band connects the abbreviated longitudinal stripes, none of which extend forward beyond this band.

12. *G. clathratus* Jord. 1895.

12. White lines of elytra continued to near apex ; pygidium bidentate ; head (♂) with cavity . . . . . 13.

Apical half of elytra without white lines ; apex of pygidium rounded

13. *G. coronatus* Jord. 1904.

13. Median vitta of pronotum reaching a little beyond middle, remaining separate from transverse median band ; no brown V-mark in basal half of elytra ; pygidium distinctly bidentate

14. *G. bryanti* Jord., p. 213.

White lines of elytra very thin . . . . . 15. *G. calus* Jord. 1906.

Pronotum with two large yellow, oblique, subapical spots, median vitta nearly reaching apex ; angle of carina acute ; white lines of elytra occupying alternate interspaces as in *G. bryanti*

16. *G. indagatus* Wolfr. 1931.

#### SUBSECTION B.

Only two species known, which form a group *c*.

*Group c.*—Characters of Subsection, p. 233.—Species 17 and 18.

14. Between median vitta of pronotum and lateral border three white longitudinal markings ; elytra with a large blackish X, the two lines crossing at suture . . . . . 17. *G. bella* Jord. 1904.

Between median vitta of pronotum and lateral border two longitudinal markings ; the X of *G. bella* only indicated by an oblique line from shoulder to line IV of punctures . . . . . 18. *G. clara* Jord. 1904.

SUBSECTION C.

*Group d.*—Pygidium white, with or without brown median stripe, or with white border, sometimes the border confined to base.—Species 19–53.

15. Light-coloured median stripe of rostrum and frons continued on occiput as a median stripe ; no lateral stripe on occiput . . . . . 16.

The light-coloured stripe (white, yellow or red) divided into two or three branches on occiput, or the whole occiput with light pubescence . . . . . 17.

16. Lateral vitta of pronotum in front of apex of lateral carina ; before apical declivity of elytra an anguliform mark across suture, no apical spot . . . . . 19. *G. claudia* Jord. 1906.

Lateral vitta of pronotum from upperside of lateral carina ; no anguliform mark before apical declivity of elytra, apical spot present on each elytrum . . . . . 20. *G. tenuis* Jord. 1895.

Grey sutural area of elytra narrow, divided into a double stripe, each curved forward-sideward as a narrow band, apical spot of elytrum longitudinal . . . . . 21. *C. doris* Jord., p. 228.

17. On pronotum a vitta placed in front of apex of lateral carina and running from underside obliquely to apex where it joins lateral stripe of occiput . . . . . 18.

Markings of pronotum different . . . . . 19.

18. Elytra with dark V behind base ; basal longitudinal carinula of pronotum nearly horizontal ; angles of anal sternum not projecting . . . . . 22. *G. acutangulus* Jord. 1904.

Elytra without dark V, with grey marking resembling the outline of a bell with handle ; basal longitudinal carinula strongly oblique ; angles of anal sternum more or less projecting . . . . . 23. *G. lyrestes* Jord., p. 214.

19. On pronotum a dorsal vitta remote from lateral carina, on side of prosternum a broad horizontal vitta ; pygidium truncate, anal sternum bidentate, the teeth short in ♀ . . . . . 24. *G. vanda* Jord., p. 219.

Markings of pronotum different or, if the same, pygidium bidentate and apex of anal sternum rotundate . . . . . 20.

20. Anal sternum strongly bidentate, the teeth projecting much beyond pygidium . . . . . 21.

Anal sternum not bidentate, in ♂ of some species sinuate, but the angles not drawn out as spiniform teeth . . . . . 24.

21. White border of brown pygidium restricted to base ; rostrum with notch behind antenna bearing in ♂ a short brush, which is rudimentary in ♀ . . . . . 22.

White border of pygidium more or less complete or the whole or nearly the whole pygidium white ; rostrum of ♂ without lateral brush . . . . . 23.

22. On pronotum a broad stripe from upperside of lateral carina obliquely upward to beyond middle . . . . . 25. *G. daguanus* Jord. 1897.

Between lateral carina and median vitta a thin, interrupted, abbreviated line . . . . . 26. *G. moranus* Jord., p. 222.

23. Lateral vitta of pronotum complete ; no small antemedian sutural spot in grey area ; apex of pygidium evenly rounded . . . . . 27. *G. acastus* Jord., p. 215.



- Lateral vitta interrupted ; a small brown antemedian spot on suture ;  
pygidium subtruncate, with the angles slightly turned up  
28. *G. scalaris* Jord. 1906.
- Lateral vitta represented by a few white speckles at lateral carina ;  
elytra with large triangular apical spot bisinuate on each elytrum, a  
small apical sutural dot remaining brown ; pygidium entirely white  
29. *G. mexicanus* Jord. 1906.
24. Pygidium bidentate, the teeth more or less spiniform . . . . . 25.  
Apex of pygidium rounded or truncate, angles effaced or at least not  
projecting as sharp teeth . . . . . 37.
25. Between lateral carina and median vitta a complete vitta from base to  
apex, at least dorsally sharply defined, median vitta with straight  
edges . . . . . 26.  
Between dorsolateral vitta and median one some additional grey pubes-  
cence which forms spots or incomplete stripes, or dorsolateral vitta  
interrupted, or not extended to apex . . . . . 34.
26. Metepisternum without brown spot in middle ; abdomen without brown  
sublateral stripe . . . . . 27.  
Metepisternum with large brown patch ; abdomen with brown sublateral  
stripe separating a creamy lateral stripe from creamy ventral area 31.
27. Pygidium much longer than broad . . . . . 30. *G. mollis* Jord., p. 217.  
Pygidium not longer than broad . . . . . 28.
28. White vittae of head united on rostrum, divided by the carina ; elytra  
with small apical spot and a very narrow, transverse, curved, subapical  
band . . . . . 31. *G. hedys* Jord., p. 216.
- White vittae of rostrum and head narrow ; subapical transverse band  
of elytra broad, enlarged to a triangle on suture  
32. *G. thecla* Jord. 1906.
- Elytra without a narrow subapical band in addition to an apical spot 29.
29. Pygidium with brown median line ; basal lateral carinula of pronotum  
horizontal ; grey area of elytrum not drawn out into a narrow  
obliquely transverse band . . . . . 33. *G. vitticollis* Jord. 1895.
- Pygidium with brown elongate-pyriform spot divided by a thin white  
line ; elytrum with nearly semicircular band ending above apex of  
metepimerum . . . . . 34. *G. pulchellus* Jord., p. 229.
- Pygidium entirely white ; basal lateral carinula strongly oblique . . . . . 30.
30. Lateral carina of pronotum twice as long as basal carinula ; dorsolateral  
white pubescence of pronotum not separated from pubescence of  
underside ; abdomen with brown diffuse lateral spots  
35. *G. inca* Jord., p. 218.
- Lateral carina much shorter ; a dorsal vitta partly separated from  
lateral and ventral white area by a rufous-brown stripe ; abdomen  
entirely white . . . . . 36. *G. hilda* Jord. 1904.
31. Occiput with median vitta broader than lateral ones  
37. *G. extensus* Jord. 1904.
- Median vitta of occiput absent or vestigial . . . . . 32.
32. The two brown rounded spots on subbasal swellings of elytra joined  
across suture . . . . . 38. *G. iris* Jord., p. 216.
- The spots not connected with each other . . . . . 33.

33. Angle of pronotal carina  $90^\circ$ ; borders of pygidium sharply defined  
 39. *G. libussa* Jord., p. 220.  
 Angle of carina rounded; borders of pygidium diffuse  
 40. *G. lusia* Jord., p. 219.
34. (Elytra with thin subapical curved transverse band, dorsolateral vitta of pronotum interrupted . . . . . 31. *G. hedys* Jord., p. 216.)  
 Elytra without thin subapical band . . . . . 35.
35. Dorsolateral vitta of pronotum interrupted, posteriorly broadly joined to white ventral area, lateral carina entirely within white area; anal sternum of ♂ emarginate, impressed . . . 41. *G. ancora* Germ. 1824.  
 Dorsolateral vitta of pronotum starting from basal angle, curved, not reaching apical margin, lateral carina for the greater part within brown area . . . . . 42. *G. iphis* Jord., p. 221.  
 Between dorsolateral vitta and median one some additional markings  
 36.
36. Side of elytrum brown, with two thin grey or creamy lines; pygidium creamy, with a thin white median line; lateral stripe of abdomen more or less broken up into contiguous spots 43. *G. ada* Jord., 1904.  
 Side of elytra less extended brown, with larger grey markings; underside more densely pubescent white, pygidium without thin white median line . . . . . 44. *G. signatus* Gyllh. 1833.
37. Pronotum with at least two brown stripes from base to apex . . . 38.  
 Pronotum white with or without a pair of black spots on disc, sometimes with indications of buff stripes on white ground . . . . . 42.
38. Lateral third or entire abdomen white or creamy . . . . . 39.  
 Abdomen with creamy lateral stripe; pygidium and anal sternum long; ♂ with large, ovate, hairy groove on head 45. *G. nica* Jord., p. 222.
39. Metepisternum with brown patch; elytra with brown sutural spot before middle; anal sternum of ♂ emarginate, with broad, hairy depression . . . . . 40.  
 Metepisternum without brown patch . . . . . 41.
40. Dorsolateral vitta of pronotum extending from upperside of lateral carina obliquely forward complete. . . . 46. *G. molitor* Jord. 1895  
 This vitta interrupted . . . . . 47. *C. alma* Jord. 1904.
41. Side of pronotum diffusely pubescent, without sharply defined dorsolateral vitta; angle of carina completely rounded (♀ only known)  
 48. *G. nubilus* Jord. 1904.  
 Pronotum with broad lateral vitta which is fairly well defined, at least dorsally; angle of carina  $90^\circ$ , tip rounded off; pubescence of head and rostrum, pronotum and pygidium with a pale vermilion shade; ♂ with ovate groove on head . . . . . 49. *G. clelia* Jord. 1904.
42. Pronotum with a pair of sharply defined black discal spots . . . . . 43.  
 Without these spots . . . . . 44.
43. Elytra with triangular sutural black spot at beginning of apical declivity; abdomen with white lateral stripe from segment I to V  
 50. *G. fahraei* Schönh. 1839.  
 Elytra without this sutural spot; white lateral stripe restricted to segments III to IV, there being only an indication of white on II  
 51. *C. aulicus* Jord., p. 227.

44. Pro- and mesosternite black ; white lateral stripe of abdomen restricted to segments III to V . . . . . 52. *G. leucomelas* Jord. 1904.  
 Pro- and mesosternite not black ; abdomen with white and pale ochreous lateral stripe from base to apex . . . . . 53. *G. biloris* Jord., p. 227.
- Group e.*—Pygidium brown or rufescent, with white, creamy or red median stripe.—Species 54–61.
45. Lateral carina measured from end of dorsal carina extending to apical third ; dorsolateral vitta of pronotum broken up into some obliquely placed spots ; pygidium and anal sternum with the angles more or less dentiform . . . . . 54. *G. ophiopsis* Dalm. 1833.  
 Lateral carina extending at most a little beyond middle . . . . . 46.
46. Elytra flattened at suture, but not depressed ; rostrum as long as broad ; pygidium rounded at apex ; anal sternum strongly bidentate ; underside almost uniformly white . . . . . 55. *G. polius* Jord. 1906.  
 Elytra depressed in sutural area ; abdomen with white or yellow lateral stripe ; anal sternum with the teeth short or absent . . . . . 47.
47. No vitta between median one and lateral carina and no or very little white pubescence along upperside of the latter ; angles of pygidium almost effaced, those of anal sternum more or less distinct, but short . . . . . 56. *G. lotus* Jord., p. 224.  
 In lateral aspect prothorax with a ventral vitta and a dorsolateral one, the latter extending from underside across lateral carina ; base without white pubescence above longitudinal carinula . . . . . 48.
- Dorsolateral vitta commencing at basal angle, therefore basal area adjacent to longitudinal carinula white ; pygidium rather strongly bidentate, apex of anal sternite rounded . . . . . 49.
48. Brown median stripe of occiput narrower than white or yellow lateral stripe, often vestigial ; vitta of rostrum, apical spot of elytra, stripe of pygidium and lateral stripe of abdomen more or less vermilion, if not faded . . . . . 57. *G. dorsonotatus* Fährs. 1839.  
 Brown median stripe of occiput broader than white stripes ; no markings vermilion . . . . . 58. *G. procerus* Jord., p. 226.
49. Pygidium longer than broad . . . . . 50.  
 Pygidium as long as broad, or broader . . . . . 51.
50. Antenna dark brown except base ; lateral carina of pronotum ending midway between dorsal carina and apical margin . . . . . 59. *G. compar* Jord. 1895.  
 Antenna pale rufous ; lateral carina longer ; pygidium more strongly narrowed apicad, the teeth longer and nearer together . . . . . 60. *G. decorus* Perroud 1853.
51. Dorsolateral vitta of pronotum narrow, crossing dorsal carina at some distance from angle and reaching apical margin behind eye ; lateral carina with thin white dorsal border which is continued along dorsal carina to dorsolateral vitta ; elytrum with impression on apical declivity . . . . . 61. *G. regalis* Jord., p. 225.  
 Dorsolateral vitta broader, no brown spot in angle between dorsal carina and lateral carinula ; apex of elytrum without impression ; brown patch on subbasal swelling united with brown lateral area, not across suture with corresponding spot of other elytrum . . . . . 62. *G. pentilus* Jord., p. 225.

**Section II.**—Pronotum longitudinally carinulate; if coarsely rugate, the ridges more or less longitudinal, not transverse; sometimes the ridges restricted to the area in front of dorsal carina or even to the antecarinal portion of the median vitta. I include here the species known as *Anulotes discoideus* Fährs. 1839.

Some of the species agree closely with certain species of Section I in colour, pattern and build.

*Subsection D.*—Derm of frons and occiput red, this area sharply defined, and elytra with white double lines, as in *Subsection A.*—Species 63.

*Group f.*—One species; rostrum twice as broad as long; pronotum with five grey vittae, the two lateral ones connected with each other anteriorly by a transverse band; apex of pygidium and anal sternum rounded, on pygidium a straight black median stripe . . . . . 63. *G. germaini* Jord. 1896.

*Subsection E.*—Derm of frons and occiput without sharply defined red area; rostrum not nearly double as broad as long; elytra without white double lines from base to apex.—Species 64–84.

*Group g.*—Pygidium brown, with white border, or white with sharply defined brown median stripe.—Species 64–71.

52. Occiput with undivided median vitta, sides brown, the vitta more or less vermilion; dorsolateral vitta of pronotum crossing dorsal carina a short distance from angle, more or less abbreviated; abdomen with lateral stripe of three large white spots

64. *G. marianna* Jord. 1904.

Occiput with vitta each side, or entirely white or yellow except a posterior median brown spot . . . . . 53.

53. Dorsolateral vitta of pronotum commencing at upperside of lateral carina; between rounded angle of carina and median vitta a short vitta starting from behind dorsal carina and not reaching halfway to apex; side of abdomen with four transverse white bands; apex of pygidium and anal sternum truncate-rotundate, angles not produced as spines; upperside of proboscis more or less vermilion

65. *G. vicinus* Jekel 1855.

Dorsolateral carina starting from base, its dorsal margin crossing dorsal carina at some distance from angle; no short vitta between dorsolateral and median vittae . . . . . 54.

54. Dorsolateral vitta some distance away from lateral carina, the space in and behind lateral angle of carina brown; brown median area of occiput large, continued to apex of rostrum; elytra with triangular sutural spot or a band before apical declivity; middle abdominal segments laterally with more or less distinct brown spots at apical margin; angles of anal sternum projecting; antenna of ♂ reaching to base of elytrum . . . . . 66. *G. pindonis* Jord., p. 231.

No band or triangular sutural spot in front of apical declivity of elytra

67. *G. ampulla* Jord. 1906.

Dorsolateral vitta commencing at basal angle, filling in the angle of carina and remaining contiguous with lateral carina for some distance, the separation from white underside being sometimes indistinct; pronotum at least one-third broader than long; angles of anal sternum rounded . . . . . 55.



55. Brown median area of occiput extending on to rostrum ; abdomen with lateral brown spot at apical margin of segments II to IV . . . 56.  
Brown median area of occiput not extending to rostrum ; no brown spots on abdomen ; pygidium with brown median stripe . . . 57.
56. Centre of head and disc of pronotum rugate-reticulate ; pygidium brown with narrow lateral white borders . . . 68. *G. talis* Jord., p. 230.  
Centre of head and disc of pronotum rugate-plicate, with distinct longitudinal ridges ; pygidium yellowish white, with brown median stripe . . . 69. *G. helena* Jord. 1904.
57. Angle of pronotal carina  $90^\circ$ , its tip hardly at all rounded off ; brown median stripe of pygidium narrower than white border ; apical spot of elytrum triangular, broader than border of pygidium . . . 70. *G. soror* Jord. 1907.  
Angle of carina more than  $90^\circ$ , apex rounded off ; brown median stripe of pygidium broader than white border ; apical spot of elytrum about as broad as border of pygidium . . . 71. *G. brevisrostris* Jord. 1895.
- Group h.*—Pygidium white, with or without brown lateral spot or stripe, or brown with white median stripe.—Species 72–84.
58. In anterior half of pronotum a white stripe running from underside obliquely upward ; abdomen transversely banded at side ; antennae compressed, in ♂ longer than body ; derm of head rufous . . . 59.  
Pronotum with three white vittae regular in shape, four brown or rufescent interspaces . . . 60.  
Vittae irregular, brown interspaces therefore not straight stripes ; dorsolateral vitta short or more or less fused with white underside . . . 62.
59. Elytrum with white basal halfring open behind and trapeziform ante-median patch from punctate line I to beyond IV, pointed behind ; white median stripe of pygidium broad . . . 72. *G. variicornis* Jord. 1895.  
Elytrum with nearly straight basal border, a straight white line from behind subbasal swelling to middle, here curving sideward-forward ; white stripe of pygidium narrow . . . 73. *G. phanerus* Jord., p. 229.
60. Elytrum with anguliform line as in *G. phanerus*, but the line meets that of other elytrum on suture and is continued to scutellum, this design somewhat resembling an anchor ; before apical declivity a nearly straight narrow band from side to side ; antenna of ♂ stout, not reaching apex of elytra, VIII longer than IX . . . 74. *G. flexuosus* Jord. 1895.  
Elytra with triangular spot on suture before apical declivity, the spot sometimes drawn out to lateral margin . . . 61.
61. Grey sutural area divided posteriorly, not joining the triangular sutural spot . . . 75. *G. affinis* Jord. 1895.  
Grey sutural area joining the sutural spot ; club of antenna broader than in *G. affinis* . . . 76. *G. editha* Jord. 1904.
62. Tarsal segment I shorter than claw-segment . . . 63.  
Tarsal segment I longer than claw-segment, especially in midtarsus . . . 64.
63. Median vitta of pronotum abruptly narrowed, posterior half twice as broad as anterior ; apical spot of elytrum not sinuate ; antenna of ♂ reaching beyond base of elytra, with club narrow, shaft slender in ♂ ♀ ; hindtibia of ♂ with apical hook . . . 77. *G. hamatus* Jord. 1904.

- Anterior half of median vitta represented by a few white hairs ; basal half of elytra suffused with white, apical spot of elytrum deeply sinuate anteriorly ; ♀ only known . . . . . 78. *G. martha* Jord. 1904.
64. Antenna reaching in ♂ beyond elytra, in ♀ beyond base of pronotum, shaft compressed in ♀, broad . . . . . 79. *G. discoideus* Fährs. 1839.
- Antenna shorter, shaft normal in ♀ . . . . . 65.
65. Brown area of pronotum irregular, laterally more or less ill-defined or bearing a short vitta . . . . . 66.
- The two brown areas of pronotum well-defined . . . . . 67.
66. Underside thinly pubescent, except on prosternite, mesosternal intercoxal process, and a lateral stripe on meso-metasternite and abdomen ; apical spot of elytrum smallish ; rostrum with brown side in ♂♀ ; in ♂ segment III of antenna longer than II . . . . . 80. *G. irma* Jord. 1904.
- Underside almost uniformly white or creamy ; apical patch of elytra occupying nearly the whole declivous area, anteriorly sinuate between punctate stripes V and VIII ; pygidium narrow and long ; rostrum entirely white in ♂, segment III of antenna of ♂ as long as II . . . . . 81. *G. nanus* Jord. 1904.
67. White pubescence extending from underside very little above lateral carinula ; occiput brown at side, narrowly yellow in middle, frons entirely yellow ; apical patch of elytra large, not divided at suture, with small apical sutural brown spot ; underside uniformly white or creamy . . . . . 82. *G. abundans* Jord. 1906
- White pubescence extending well above lateral carina and carinula . . . . . 67.
68. Occiput with brown central area which extends on to frons or even rostrum ; apical patch of elytra divided by brown suture ; underside uniformly white . . . . . 83. *G. erna* Jord. 1904.
- Occiput with diffuse brown median spot variable in size, sometimes obsolete ; apical spot of elytrum small, at beginning of apical declivity a transverse triangular spot on suture ; abdomen more densely pubescent at side than beneath ; shaft of antenna of ♂ stout . . . . . 84. *G. elisa* Jord., p. 230.

### 39. *Phaenithon eximius* sp. nov.

♂♀. Upperside densely pubescent ochraceous buff and spotted with black. Pronotum with a broad median furrow from base to near apical margin. Intercoxal process of mesosternum strongly convex in middle, tuberculiform.

Black, upperside ochraceous buff, speckled with white hair-scales which are more or less condensed around the brown-black markings. Rostrum double as broad as long, entirely ochraceous buff, as is also the head, lateral angle a little nearer to base of mandible than to apex of eye-sinus, dorsal edge of eye continued on to rostrum as a carina which stops short halfway to apex, on frons three other carinae extending on to base of rostrum where they are united. Frons a little more than one-third the width of rostrum. Interspace between antennal groove and eye below sinus a little broader than segment II of antenna is long. Eye slightly longer than broad, anteriorly margined with white. Antenna short, club twice as long as broad in ♂, shorter in ♀.

Pronotum two-fifths broader than long, minutely coriaceous, a deep broad channel from base to near apical margin occupies at base about one-third,

behind apex one-sixth of the surface ; it is bounded each side by a high broad ridge ; half-way between middle and side a broad brown-black stripe from base on to the callosity, with two short transverse projections into the median ochraceous area and before middle a short projection forward, in middle the stripe expanding sideward for a short distance and then running to apical margin, which it reaches behind eye, behind apex an isolated brown-black spot each side of channel, sometimes also a short brown median line in channel, a brown spot above lateral carina and a grey postmedian dot in brown stripe ; dorsal carina slightly concave from side to side, almost gradually flexed forward, the arc rather flat, lateral carina continued upward by a vestigial line, subbasal transverse carinula distant from dorsal carina at angle, but soon approaching it very closely and disappearing before reaching median channel. Scutellum white, broader than long.

Elytra one-third longer than broad, depressed along suture, interstice III costate, V and VII slightly convex, IV impressed ; the following spots brown-black, all more or less edged with white : a round dot behind scutellum, a median sutural patch reaching to punctate stripe III and expanding shortly forward and backward on suture, a small anteapical sutural dot, in interstice III before apical declivity a linear spot, isolated or joined to a lateral patch, halfway to shoulder a basal and a subbasal spot, behind shoulder a submarginal isolated dot, well before middle a marginal patch extending upwards about to row VII of punctures, above it several small spots, sometimes confluent and forming an extension of the lateral patch, connecting it with the brown shoulder angle and nearly with the median sutural spot, well behind middle another marginal patch, more or less prolonged upwards as an abbreviated irregular band, before apical margin a small spot, all these markings variable. Pygidium a little broader than long, ochraceous buff, with some sprinkling of white, a diffuse spot in middle of base, the apical margin and a smear between middle and side white.

Underside white, a spot at side of metasternite and a row of lateral spots on abdomen brown-black ; prosternum in front of coxa about two-thirds as long as diameter of coxa ; metasternum and abdomen of ♂ broadly flattened, segment V nearly as long as III + IV, with deep apical groove ; in ♀ V as long as III + IV, emarginate in middle. Apices of tibiae and the tarsi brown-black, segment I of tarsi except apex and IV except base white, I in foretarsus of ♂♀ as long as II + III, shorter than claw-segment, foretarsus broader in ♂ than ♀, midtibiae of ♂ with apical spinulose hump.

Length 5.4–8.0, width 2.5–3.7 mm.

Brazil : Jatahy, Goyaz, 2 ♂♂ (type) ; Diamantino, 1 ♀ ; also from Cayenne.

#### 40. *Phaenithon brevitarsus* sp. nov.

♂♀. In colouring exactly like *Ph. longicornis* Jord. 1904, but differs in the proboscis, antennae and tarsi.

Rostrum depressed in front of eye, feebly but noticeably convex in median area, not flat and slightly uneven as in *Ph. longicornis*, lateral angle more obtuse than in that species. Median carina of frons thin and short, no distinct lateral ridges. Antenna short in both sexes, VIII broader than long, shaft slender in ♂ as in ♀, whereas in *Ph. longicornis* the ♂ antenna is prolonged, VIII being at least twice as long as broad. In ♂ of *Ph. longicornis* abdomen medianly impressed,

with a pair of tufted tubercles on IV, in *Ph. brevitarsus* both I and IV with a pair of tufted tubercles. All tarsi deep brown in *Ph. longicornis* and the ♀ of *Ph. brevitarsus*, but in ♂ of *Ph. brevitarsus* fore- and midtarsi greyish white, moreover segment I of foretarsus of ♂ less than twice as long as broad, being about half the length of claw-segment, in midtarsus I not quite so short, but shorter than claw-segment, in hindtarsus I as long as II to IV together.

Largest specimens the size of the smallest we have of *Ph. longicornis*.

Length 5.3–7.3, width 2.2–2.9 mm.

French Guiana: Gourdonville and Pariacabo, viii.–xii. 1905, a series; we have also *Ph. longicornis* from the same localities. In Carnegie Museum *Ph. brevitarsus* from Pará.

#### 41. *Phaenithon foveiceps* sp. nov.

♂♀. In both sexes a deep groove anteriorly on occiput.

Rufescent brown. Pubescence of rostrum and head diffuse, not concentrated into a stripe or stripes, denser in slightly convex centre of rostrum. Lateral angle of rostrum midway between bottom of sinus of eye and mandible, apical sinus rounded, lateral portions of apical margin nearly straight. Frons rugulose, faintly concave, with irregular thin median carina, pit in between posterior third of eyes ovate, its transverse diameter nearly half the distance of pit from eye (pit smaller in a dwarf ♀). Interspace between eye and antennal groove broader below sinus than segment II of antenna. Eye longer than broad. Antenna short, club as long as shaft, thrice as long as broad, X one-fourth broader than long, IX and XI longer than broad.

Pronotum two-sevenths broader than long, hardly at all depressed before carina, flattened in apical area, with the apical margin slightly incurved between the eyes, especially in ♂, disc evenly but not strongly convex, without median furrow, at each side of middle an irregular white vitta, broken up into dots in ♀, an incomplete median vitta likewise irregular, composed of spots, these vittae more or less connected at base and apex, before carina at outer side of submedian vitta an elongate spot, additional dots in central and lateral brown areas, variable in number; dorsal carina slightly undulate, concave from side to side, curved forward at side in a shallow arc, continued beyond middle as a thin vestigial line, basal longitudinal carinula nearly as distinct as subbasal transverse one. Scutellum white, transverse, triangular.

Elytra about one-fourth longer than broad, not depressed at suture, subbasal swelling vestigial; punctate-striate, interstices flat, no depression before apical margin, declivity very gradual, in ♂ rufescent-brown subbasal swelling encircled by white dots which on suture and behind swelling are more or less confluent, and on and before apical declivity a number of white dots, confluent or separate, a few additional in central and lateral areas, in ♀ the dots more numerous and most of them separate, only the subbasal swelling and a median sutural patch being devoid of them. Pygidium nearly alike in ♂ and ♀, a little longer than basally broad, strongly narrowing apically, especially in ♂, with the apical margin evenly rounded, a median line composed of more or less confluent spots and a small number of lateral spots white.

Underside white; on metepisternum and abdominal segments II and III usually a brown spot each; intercoxal process of mesosternum convex, but not



tuberculiform, abdomen of ♂ medianly flattened, V transversely impressed. Legs rufous, tarsi and apices of tibiae blackish brown, segment I for the greater part white, foretibia of ♂ ventrally with a small apical tooth.

Length 6.2-6.5, width 2.5-3.1 mm.

French Guiana: Gourdonville and Pariacabo, xi. 1905, i. 1906, 2 ♂♂, 1 ♀, type ♂; in Carnegie Museum from the Amazons.

#### 42. *Phaenithon hypocaelus* sp. nov.

♂♀. Near *Ph. figuratus* Gyllenhal 1833; differs as follows: shaft of antenna and tibiae dark brown; segment XI of antenna at most as long as broad; pronotum more coarsely coriaceous and more convex, between laterodorsal vitta and lateral carina a diffuse vitta indicated, lateral carina short, not nearly reaching to middle; apical spot of elytrum more rounded, pygidium white, at most with a brown smear each side of middle, strongly convex in ♀ and much less narrowed towards apex; abdomen of ♂ rather deeply impressed from I to V, the groove deepest on III and IV, at apical margin of these segments each side of groove a small notch, V a little longer than IV, without median tuft, in ♀ V shorter and apically broader than in *Ph. figuratus*; underside of abdomen dispersedly punctate in both sexes; tarsi and apices of tibiae brownish black, pubescence on underside of mid- and hindfemora shorter than in *Ph. figuratus*.

Brazil: Bahia, two pairs.

#### 43. *Phaenithon phelus* sp. nov.

♂♀. Likewise close to *Ph. figuratus*; interspace between margin of antennal groove and eye below sinus only as wide as segment II of antenna is broad; antenna dark brown, club as in *Ph. figuratus*; pronotum medianly more strongly rugulose, vittae narrower, lateral carina continued forward by a thin vestigial line; sutural buff stripe reduced in length and width, not reaching to middle, rest of suture and the alternate interstices dotted with buff, four to seven dots in each row, apical spot separate from apical margin, at least laterally; pygidium of ♂ as in *Ph. figuratus*, with or without brown smear between middle and side; abdomen of ♂ with rather narrow depression from I to IV, V with deep groove entirely filled in with buff pubescence; tarsi and apical half or third of tibiae brown-black, tarsal segment I white above, foretarsus of ♂ as broad as in ♂ of *Ph. figuratus*, much broader than in *Ph. hypocaelus*.

Brazil, 3 ♂♂.

#### 44. *Phaenithon stellans* sp. nov.

♀. Club of antenna consisting of two segments, X being absorbed.

Cylindrical, dark brown, upper surface rather densely dotted with creamy pubescence. Rostrum thrice as broad as long, being very short, depressed along apical margin, which is turned up, median sinus shallow, angle of lateral margin strongly rounded. Frons half as broad as rostrum, flat. Interspace between antennal groove and eye below sinus narrower than segment II of antenna. Eye slightly longer than broad. Antenna dark brown, club paler, elliptical, half as long again as broad, segment X absent (in the only specimen before me, a ♀), VIII much broader than VII, forming part of the club, of which it has the dull surface, III about one-fourth longer than IV.

Pronotum nearly two-thirds broader than long, convex, very feebly depressed along dorsal carina, densely granulate-eoriaceous, the creamy dots laterally partly confluent; lateral carina short, longitudinal carinula distinct, transverse carinula short. Scutellum slightly slanting, a little impressed along middle, broader than long.

Elytra cylindrical, not at all depressed above, somewhat swollen around scutellum, with slight indication of a depression behind this swelling, dots in the depression mostly confluent, apart from sutural one no impressed stripes, no seriated punctures, the whole surface very densely granulose. Pygidium dotted with white, as long as broad, moderately narrowed to apex, which is evenly rounded, basal half slightly convex, apical half flattened.

Underside thinly pubescent white ventrally, more densely laterally, but sides spotted and marmorated with brown. Prosternum short; intercoxal process of mesosternum slanting, somewhat concave, almost gradually narrowing, lateral angle very obtuse, apex rounded and somewhat curved back; anal sternite (♀) as long as III + IV, strongly narrowed to apex, which is as broad as IV is long in middle and sinuate, with the angles rounded off. Tibiae white except apex and extreme base, which are dark brown like the tarsi; hindfemur reaching to apex of abdominal segment IV; segment I of mid- and hindtarsi with white pubescence above, in all tarsi I shorter than twice the diameter of apex of tibia.

Length 6.8, width 3.3 mm.

Brazil: Espirito Santo, 1 ♀.

#### 45. *Phaenithon ochrinus* sp. nov.

♀. Close to *Ph. stellans* (No. 44), but club of antenna with three segments, IX as long as X + XI, pubescence of pronotum and elytra for the greater part concentrated in patches, pale buff.

Frons more than half the width of rostrum. Segment III of antenna only a trifle longer than IV, club nearly twice as long as broad and nearly as long as II to VIII together, IX broader than long, X transverse, XI only as long as X.

Pronotum with median vitta interrupted in centre, continued on to occiput, broadened at and behind carina, at side of it a broad brown irregular stripe bearing a few buffish dots, lateral fourth dotted with pale buff, the dots united at some distance above angle into a small irregular rectangle with brown centre. Scutellum creamy white.

Spots on elytra less numerous than in *Ph. stellans* and most of them larger, at base near suture but well separated from it a squarish patch, an elongate one above shoulder, a squarish one in subbasal vestigial depression, dots on apical declivous area connected with one another, spots smaller and less numerous in lateral area than above. Apex of pygidium turned up. Underside as in *Ph. stellans*.

French Guiana: Cayenne, 2 ♀♀.

#### 46. *Phaenithon romarus* sp. nov.

♂♀. As in *Ph. longitarsis* Jord. 1904, *Ph. curvipes* Germ. 1824 and *Ph. gravis* Fährs. 1839, the prosternite longer in front of coxa than the diameter of coxa.

Rostrum densely punctate, medianly slightly convex transversely, angle of lateral margin nearer mandible than apex of sinus of eye, very obtuse, apical

sinus subtriangular, a yellowish buff sharply defined median vitta divided at base, the two halves continued along eyes to base of pronotum. Antenna short, club thrice as long as broad in ♀, longer in ♂, as long in ♂ and ♀ as III to VIII together, IX longer than broad. Interspace between antennal groove and eye about twice as wide as segment II of antenna is long. Eye longer than broad. Frons with irregular median carina extending on to rostrum and longitudinally rugate-reticulate.

Pronotum very densely and finely coriaceous, one-eighth broader than long, gradually narrowed from before basal angle, moderately convex, somewhat depressed along dorsal carina, apical margin medianly incurved, especially in ♂; a short, narrow, median vitta at base, a broader, complete, laterodorsal vitta, somewhat curved, being convex dorsally, crossing dorsal carina about halfway between middle and side, the brown dorsolateral area broader in centre than brown median area, the three vittae joined together along carina, base behind carina creamy white from side to side, dorsal carina feebly concave, lateral carina very oblique, the arc, therefore, rather wide, this carina continued for a short distance as a vestigial horizontal line, basal longitudinal carinula distinct, not quite joining lateral carina, forming an angle of 90° with transverse carinula, this carinula close to dorsal carina except at lateral angle. Scutellum white.

Elytra about half as long again as broad, narrowing posticad, not depressed dorsally, finely punctate-striate, none of the interstices costate, apical declivity gradual, not humped, sutural area creamy white from base to two-thirds, extending at base to lateral margin, nearly interrupted at shoulder, widened above shoulder, again expanding laterad to line IV of punctures behind subbasal swelling, which remains brown and is broadly continuous with lateral brown area, the white area then narrows to lines III and II and behind middle expands to III and is joined (or nearly, type) to an elongate postmedian spot placed in interstice V, the suture remaining narrowly brown except at base, an antemedian, irregularly rounded, spot in interstices VII and VIII and a very small spot at margin a little farther forward, at apex an obliquely transverse spot, touching neither suture nor margins. Pygidium longer than broad, with the borders and a median vitta creamy white, the vitta broad at base, tapering apically and more or less interrupted, in ♂ pygidium rugulose, somewhat convex, first slanting and then gradually vertical, apical margin straight in middle, in ♀ granulose, gradually narrowed, with the apex evenly rounded.

Underside creamy white, pubescence thinner ventrally on metasternite and abdomen than laterally; prosternum about one-third longer in front of coxa than diameter of coxa; mesosternal intercoxal process somewhat narrower than coxa, the rounded apex curved back, lateral angle strongly rounded, not tuberculiform, middle slightly concave; in ♂ metasternum very moderately flattened, abdomen narrowly flattened on I to IV, hardly at all impressed, V shorter than IV, with deep round median groove, III and IV each with two small pale subapical tufts; in ♀ V as long as III + IV, apex rounded, with very small median sinus; in both ♂ and ♀ a spot anteriorly on mesepimerum, a large spot on metepisternum and a row of lateral marginal spots on abdomen brown. Tarsi and apices of tibiae brownish black, foretarsal segment I longer than claw-segment, midtibia of ♂ without mucro.

Length 7.3-7.9, width 3.1 mm.

Amazonas: Santarem, one pair, type (♂) in Carnegie Museum.

47. *Phaenithon mendis* sp. nov.

♂♀. Head and pronotum coarsely and very densely punctate-rugate. ♂ easily distinguished from that of similarly coloured species by the presence of a prominent median tubercle on abdominal sternum IV and by the upper-side of the midtibia being flat and bearing along this area a carina from base to apex.

Black, with white pubescence. Rostrum more than twice as broad as long, white, slightly convex, but depressed behind elevate apical margin, angle of lateral cariniform margin nearer base of mandible than apex of sinus of eye, rounded, the margin continuous with apical margin, the two forming a wide arc, median apical sinus shallow. White pubescence of head not dense except at eyes, frons in ♂ less and in ♀ a little more than one-third as wide as rostrum (this measured from angle to angle, not from sinus of eye). Eye almost circular. Interspace between eye and antennal groove below sinus of eye as broad as antennal segment I. Antenna short, black, rufescent at base, club paler, as long as segments III to VIII, a little more than half as long again as broad.

Pronotum one-half broader than long, moderately convex, slightly flattened at apex, no subbasal depression, rather more than central half brown with a diffuse, interrupted white median stripe or some scattered white pubescence at base and apex, sides with a pair of irregular, partly confluent stripes and one or two spots, all rather indefinite; dorsal carina somewhat concave, lateral carina quite short. Scutellum white.

Elytra cylindrical, one-third longer than broad, not depressed along suture, subbasal swelling vestigial, with a feeble depression behind it; punctate-striate, interstices flat, markings white: from base to one-third (or beyond) of suture a broad stripe curving sideways behind subbasal swelling and connected with basal margin by a line in interstices V and some dots in III, these interstices as well as VII and IX also elsewhere bearing some white dots, at apex an indefinite, variable, patch across suture. Pygidium longer than broad, a little narrower in ♂ than in ♀, gradually narrowing to apex, which is rounded, white pubescence more concentrated along middle and sides.

Underside white, without brown spots. Interecoxal process of mesosternum narrower than coxa, apex curved back, at side an indication of an angle. Abdomen of ♂ not depressed on I to IV, tubercle of IV subapical, small but rather high. Legs white, in ♂ inclusive of tarsi, only hindtarsus less densely pubescent (partly rubbed); in ♀ I of midtarsus and base of I in foretarsus white, the rest dark brown. The flat upper surface of midtibia of ♂ outwardly bounded by a carina is, on the inner side, bounded by a carina only proximally.

Length 4.3-4.8, width 2.0-2.2 mm.

Brazil: Hansa Humboldt, Sta. Catharina, i. and ii. 1936 (A. Maller), a series; in Carnegie Museum from Chapada.

*Phaenithon mediocris* Jekel 1855.

The original description was evidently based on the ♀. The ♂ agrees with the ♀ in colouring; the midfemur is enlarged on ventral side into a broad conical protuberance which is somewhat concave on frontal side and here, towards inner surface, studded with brown, erect, almost spiniform scale-hairs; pygidium longer than broad, convex, i.e. apex curved slightly frontad, apical margin broad,



truncate-emarginate, angles rounded. Abdominal sterna I to IV flattened-depressed, lateral margin of depression elevate on II to IV, apical margin of IV also elevate, round, projecting a little over base of V, the depression with its raised margins somewhat resembling half a watchglass, V truncate-rotundate, short, broadly depressed. In both ♂ and ♀ interspace between antennal groove and eye below sinus rather wider than segment II of antenna is long.

A pair from the Amazons.

#### 48. *Phaenithon aspersus* sp. nov.

♂. Rather broader than *Ph. mediocris* Jekel 1885, markings more indefinite, midfemur simple, midtibia with apical mucro, abdomen depressed from I to V, the depression not bounded by a ridge, apex of pygidium evenly rounded.

Head and rostrum white, buffish on occiput, lateral angle of rostrum nearer mandible than apex of eye-sinus, centre slightly convex, apical sinus broad. Frons two-fifths the width of rostrum, with central carina, sides rugate-plicate. Interspace between antennal groove and eye below sinus a little wider than segment II of antenna is long. Eye a very little ( $\frac{1}{1\frac{1}{2}}$ ) longer than broad. Antenna short, club not quite twice as long as broad, apex of IX and X very oblique.

Pronotum rather coarsely rugate-coriaceous, medianly somewhat longitudinally plicate, markings buff at apex, white elsewhere, at apex and at base a short median stripe and a dorsolateral patch indicated, in between them the brown ground irrorated with white pubescence, all indefinite; dorsal carina very slightly undulate, lateral carina continued for some distance obliquely upward by a vestigial raised line, basal longitudinal carinula very oblique, distinct, transverse subbasal carinula farther from basal margin than from dorsal carina except at point of juncture with lateral carinula. Scutellum white.

Elytra nearly as short as in *Ph. semigriseus* Germar 1824, strongly convex, not depressed at suture except very feebly behind vestigial subbasal swelling, seriated punctures distinct, the rows hardly at all impressed as stripes except sutural one; as in *Ph. mediocris* a white basal sutural patch extending behind brown subbasal swelling to interspace IV and at basal margin to near shoulder with two interruptions, behind scutellum a small brown dot on suture, before middle a sutural area almost devoid of grey irrorations, farther back to near apical declivity interspaces I to III with white diffuse dots, interspaces V to IX dispersedly irrorated with ochraceous buff, at margin from base to beyond middle an interrupted, more or less grey line, at apex a largish triangular patch ochraceous buff, about as long at suture as at apical margin, somewhat indefinite. Pygidium longitudinally slightly convex, longer than broad, white, but pubescence less dense between middle and sides, the pygidium being nearly trivittate.

Underside white, a spot on metepisternum and a lateral row of spots on abdomen brown (partly denuded). Segment I of foretarsus a little shorter than II + III, hindtarsus blackish brown like apices of tibiae, segment I depressed, somewhat asymmetrical, with a white stripe in basal two-thirds of outer side. Intercoxal process of mesosternum as broad as coxa, slightly concave, apex turned backwards.

Length 5.7, width 3.0 mm.

Brazil: Jatahy, Goyaz, 1 ♂.

49. *Phaenithon apertus* sp. nov.

♂. Similar to *Ph. aspersus*. Pronotum very densely and evenly punctate-coriaceous, without longitudinal wrinkles, in middle a short apical stripe and a longer and broader basal one joined together by some white pubescence, halfway to side a subapical spot, and at one-fourth from centre another buff, rest of surface irrorated with white speckles; dorsal carina laterally less curved forward, lateral arc more strongly curved, lateral carina short, continued by an indistinct horizontal line, basal longitudinal carinula obsolescent. Scutellum buff.

Elytra more strongly convex at base of suture, the larger patches of pubescence buff, most of the others white, especially on suture and at side, basal sutural patch less compact, being invaded by brown, on line VI of punctures a postmedian linear buff spot, apical declivity irrorated with buff, without condensed patch, rest of elytra dispersedly irrorated with white. Pygidium more convex than in *Ph. aspersus*, rugate-granulate-punctate, moderately narrowed to apex, with buff median stripe, ill-defined like all markings of upper surface, apex white, truncate-rotundate, with the angles strongly rounded, sides and base sparsely irrorated with white.

Underside white, side of prosternite rugulose, of metasternite densely punctate-coriaceous; intercoxal process of mesosternite somewhat narrower than coxa, longer than broad, apex curved backwards, lateral angles feebly marked, not swollen, the surface in between hardly at all concave; metasternum medianly broadly flattened, segments I and II of abdomen moderately flattened, not impressed, III and IV not flattened, V longer than IV, transverse, transversely slightly depressed, apex medianly truncate. Legs pubescent white, inclusive of upperside of tarsi, but this pubescence thin on tarsal segments II-IV, tibiae and mid- and hindtarsal segment I except blackish apices pale luteous, rest of tarsi blackish, foretarsal I not longer than II + III, IV longer than I to III, midtibia without mucro, with a small hump instead, bearing a number of spines which are shorter than the normal spines of apical margin, hindtarsal I nearly as long as II to IV.

Length 4.3, width 2.3 mm.

Brazil: Jatahy, Goyaz, 1 ♂.

50. *Phaenithon perfectus* sp. nov.

♂♀. Similar to *Ph. jucundus* Jord. 1906, median vitta of pronotum complete, lateral carina short, intercoxal process of mesosternum vertical, but its apical triangular portion almost abruptly turned anad, being horizontal and its centre a little above the level of metasternum, abdominal segment IV of ♂ with two tubercles.

Rostrum more than twice as broad as long; frons about half as wide as rostrum, with a creamy-buff border to eye, on occiput a thin median line of variable length of the same pubescence. Median vitta of pronotum abruptly widened behind carina and just in front of it, not connected along carina with dorsolateral vitta, which tapers in front and does not reach apical margin, white pubescence of underside ascending to level of upper margin of eye, the apex of dorsolateral vitta being sometimes joined to this marginal upward extension, at base the white pubescence reaches behind and in front of carina

to dorsolateral vitta, lateral carina quite short, not continued forward by a thin raised line as in *Ph. jucundus*, fringe of apical margin entirely creamy buff.

Pattern of elytra not so definite as in *Ph. jucundus*, subbasal swelling encircled by white, this pubescence extending at base to outer margin, from this ring emanate backwards one or more stripes, usually diffuse and variable in length, or the dorsal area from irregular ring to apical third mottled with white, at side above metepimerum a spot, another much larger one at apex touching neither margin nor suture. Pygidium white, in ♀ with two diffuse brown smears, which are sometimes broken up into four indistinct spots.

Underside white; abdomen of ♂ medianly depressed, segment IV at apical margin with two small tufted tubercles; midtibia of ♂ with indication of a hump at apex.

Length 4.7–7.8, width 2.1–3.5 mm.

Costa Rica, vi. 1935 (F. Nevermann), on dead wood, a small series, type in coll. Nevermann.

#### 51. *Phaenithon micula* sp. nov.

♂. A small and short cylindrical species, with large eyes, the pygidium truncate and the anal sternum sinuate.

Rufescent brown. Rostrum white, more than two and one-half times as broad as long (34 : 13), apical sinus shallow, angle of lateral margin very obtuse, rounded. Frons only as broad as rostrum is long, brown irrorated with creamy white, rugate, occiput brown with creamy pubescence in middle and at eye. Interspace between antennal groove and eye below sinus as broad as antennal segment II. Antenna short, club a little longer than II to VIII, IX and X short, XI longer than IX + X. Eye circular.

Pronotum half as broad again as long, coarsely punctate-coriaceous, slightly depressed along carina from side to side, moderately convex above, diffusely spotted with creamy white: at base a median spot widened behind carina, in centre a row of three more or less connected with each other, before them a rather larger median spot with a small spot at each side, lateral third of pronotum with about eight spots of which the anterior ones are joined together at apical margin; dorsal carina very slightly and evenly concave, straight towards side, the lateral angle little larger than 90° with the tip rounded off, lateral carina bordered with white, flexed downward-forward and continued upward-forward by a thin line, subbasal transverse carinula distinct to near middle, nearly parallel with dorsal carina. Scutellum creamy white.

Elytra cylindrical, not depressed dorsally, not swollen behind scutellum, subbasal swelling vestigial, stripes of punctures distinct in basal half, obsolescent posteriorly, maculation irregular, the creamy-white spots small and few at side and in a median sutural area, more or less confluent in subbasal depression, a largish transverse spot behind middle from interstice II to V, on declivous apical area numerous small spots most of which are joined together. Pygidium white, longer than broad, rather strongly narrowed to apex, which is truncate, beyond middle a vestigial median hump.

Underside white. Intercoxal process of mesosternum short, subvertical, flat, apex truncate-rotundate. Abdomen convex, not depressed, anal sternum as long as III + IV, strongly narrowing apicad, apex sinuate, oblique dorso-

lateral margin incurved. Tibiae rufous; tarsi slender, brown segment I longer than IV, in hindtarsus I three-fourths the length of tibia.

Length 3.7, width 1.7 mm.

French Guiana: Roches de Kouron, 1 ♂.

#### 52. *Phaenithon catharus* sp. nov.

♂. Near *Ph. semigriseus* Germar 1824, pronotum with three sharply defined, complete, deep creamy vittae.

Pubescence of rostrum deep creamy, divided posteriorly on frons into two stripes bordering the eyes and a short narrow median stripe; frons nearly two-fifths the width of rostrum. Pronotum minutely coriaceous, but rugulose on disc, with longitudinal wrinkles, median vitta narrowing forward, laterodorsal vitta broader, carina more strongly curved forward at side, basal longitudinal carinula obsolete, transverse subbasal carinula distinct, interrupted in middle. Scutellum broader than long, smaller than in *Ph. semigriseus*.

Elytra short and convex, seriated punctures distinct, but the rows hardly at all impressed, from base of suture to shoulder a white band continued at suture to one-fourth, here turning obliquely sideways to line V of punctures, running in interstice V to two-thirds, turning abruptly towards suture as far as row I of punctures, this upward expansion trapezoidal, widest at row I, brown patch on subbasal swelling sinuous, broadly continuous with lateral brown area, at apex a transverse oblique spot from row I of punctures towards apicolateral margin, which it does not reach, the brown sutural area bounded by the white question-marks is almost rhombiform on each elytrum and extends forward to near scutellum as a thin sutural line. Pygidium longer than broad, white, much less narrowed to apex than in *Ph. semigriseus*, apical margin round.

Underside white, inclusive of legs, exclusive of hindtarsus. Intercostal process of mesosternum slightly concave, angulate at side, apex rounded and turned backward; metasternum flattened; abdomen very feebly flattened, without groove, V very little longer than IV. Foretarsal segment I as long as II + III, shorter than IV in both fore- and midtarsus, midtibia with apical tooth, hindtarsal segments I and II apically compressed, not symmetrical, their dorsal surfaces (in our unique specimen) apically subeariniform.

Length 4.0, width 2.1 mm.

Amazonas, 1 ♂.

#### 53. *Phaenithon praetersus* sp. nov.

♀. Near *Ph. figuratus* Fährs. 1839, but occiput with three vittae and the median one of pronotum complete, broader than dorsolateral vitta, of even width from before carina to apical margin. The four rufous-brown stripes of pronotum sharply defined, the lateral one a little wider than median vitta or the same width, posteriorly half as wide as sublateral rufous-brown stripe, dorso-lateral vitta basally connected with white underside, angle of carina more abruptly rounded than in *Ph. figuratus*, denticulate lateral carina much shorter than in that species, but continued by a thin line; the whole pronotum minutely coriaceous, in *Ph. figuratus* the central area rather strongly rugulose.

Elytra subcylindrical; a basal marginal band greyish white, extended a short distance backward above shoulder and on suture to apical fourth, being



rather abruptly dilated behind subbasal swelling to line V of punctures and gradually and not so much posteriorly, before middle of side a patch or band running obliquely up- and backwards to line IV or V of punctures, at apex of each elytrum two spots connected (type) or separate, one apical, the other lateral, these spots slightly yellowish. Pygidium as in *Ph. figuratus* with three white lines, which are more or less abbreviated, especially the median one.

Underside white, abdomen ventrally less densely pubescent than at side. Tarsi and apices of tibiae pitchy black, the former slenderer than in *Ph. figuratus*, segment I of all tarsi longer than II to IV together. Mesosternal intercoxal process very feebly concave.

Length 5.0–6.2, width 2.0–2.7 mm.

Upper Amazons, 2 ♀♀.

#### 54. *Phaenithon albipennis* sp. nov.

♂♀. Foretibia strongly dilated, a basilateral spot on pronotum and several at apex of elytra and on pygidium creamy white, very conspicuous on the dark ground.

Black, strongly convex. Cariniform dorsal edge of eye continued as broadish ridge to apical third of rostrum, the surface of the rostrum being thereby divided into three areas, median area very finely punctate, depressed, especially at base, with a white, irregular, median stripe to base of labrum, lateral area densely and rather strongly punctate. Head dotted with white, a median carina on frons widening forward and here divided by a median channel. Eye longer than in *Ph. leopardinus* Fährs. 1839 (which also has the foretibia dilated). Club of antenna slightly paler than shaft, asymmetrical, XI longer than IX, more strongly rounded on posterior side than anteriorly.

Pronotum half as broad again as long, moderately depressed in front of scutellum and very feebly so along middle, minutely and very densely granulate-coriaceous, dispersedly dotted with white, from basal angle across dorsal carina a creamy-white patch not touching lateral carina, anteriorly excised or longitudinally divided, longitudinal basal carinula distinct, transverse subbasal carinula quite short. Apex of scutellum drawn out into a longer pointed ridge than is usual.

Elytra almost as broad as long, being only about one-tenth longer than broad, strongly convex, not depressed above except very feebly before middle, subbasal swelling absent, rows of punctures I, II and III distinct, the others obsolete, the whole surface dispersedly dotted with white, a larger spot near suture at basal third, a small one in middle towards lateral margin, and a largish creamy-white spot of variable size at apex separate from suture. Pygidium broader than long in ♂, a very little longer in middle than broad in ♀ and in this sex granulate, apical margin round, in ♂ medianly straight for a short distance, at base a creamy-white band usually broken up into three spots.

Underside thinly pubescent white medianly, sides dotted with white, at side of abdomen a row of three creamy-white spots on II to IV, the last the smallest; intercoxal process of mesosternum vertical, much higher and broader than coxa, transversely strongly convex at highest point, anterior surface flat; abdomen in ♂ strongly depressed along middle, in ♀ somewhat flattened. Femora and mid- and hindtibiae dotted with white, foretibia strongly compressed, black, dilated,

inner side slightly concave, outer side convex, less than four times as long as broad, pubescence short, tarsi black, segment I white.

Length 7.0–10.3, width 3.9–5.6 mm.

French Guiana: Gourdonville, viii. x. 1905, two pairs; in Carnegie Museum also a ♂ from Santarem, Amazonas.

#### 55. *Phaenithon baseopagus* sp. nov.

♂♀. Near *Ph. callosus* Fährs. 1839, but base of suture raised into a single rounded tubercle. Short and broad, of the size of large specimens of *Ph. leopardinus* Fährs. 1839, with the foretibia compressed and dilated as in that species, but proboscis quite different.

Black, densely dotted with creamy white above and below, laterally on pronotum and on underside the white dots more or less confluent, the black interspaces forming an irregular network. Rostrum more than twice as broad as long (in type 44:19), transversely depressed, irregularly creamy white except at base, middle rugulose, sides punctate-rugate, lateral margin dilated into an obtuse angle at one-fourth, from apex of angle the cariniform edge of antennal groove continued very obliquely to apical margin, antennal groove close to eye. Head dotted like pronotum, but frons more or less bare, a thin median carina on frons and numerous irregular ridges. Antenna reaching to base of prothorax, rufescent, paler at tip, segment X longer than broad in ♂, transverse in ♀, XI in ♂ twice as long as broad and in ♀ half as long again as broad.

Pronotum about one-half broader than long, strongly convex, feebly flattened before dorsal carina, which is straight, basal longitudinal carinula not well developed, transverse carinula vestigial except at side, where it is strongly developed. Scutellum slanting.

Elytra one-fourth longer than broad, not depressed at suture, but sutural area somewhat flattened posteriorly, punctate stripes fairly distinct, dorsal interstices feebly convex, sutural interspace swollen behind scutellum and at its sides a low but quite distinct callosity being formed, which is longer on suture than broad and gradually fades away posteriorly; the white spots more or less evenly distributed, very numerous and nearly all separate, except at side and behind callosity. Pygidium slightly raised in median line, spotted with white, in ♂ much broader than long, with apical margin straight in middle, in ♀ nearly as long in middle as broad, gradually and rather strongly narrowing apicad. apex somewhat turned up, evenly rounded, granulate.

Whole underside spotted with creamy white, the spots confluent (the pubescence rubbed away in middle of metasternum), intercoxal process of mesosternum subvertical, broader than coxa, apex curved back and rounded, at point of curvature angles swollen, tuberculiform, surface in between these tubercles slightly concave; abdomen depressed along middle in ♂, somewhat flattened-depressed in ♀. Forefemur and -tibia entirely brownish black, midfemur pubescent creamy white spotted with brown, midtibia uniformly pubescent creamy white with brown apex, hindfemur and -tibia spotted with creamy white and brown, tarsi more or less pale buff, segments I and II creamy white on upperside in all tarsi, if not rubbed bare, foretibia of ♂ with a small ventral tooth.

Length 6.3–9.2, width 3.3–5.3 mm.

Brazil: Espiritu Santo, 3 ♂♂, 2 ♀♀ (type ♂); in Carnegie Museum a series from Amazonas: Pará, Santarem, S. Paulo de Olivença.

56. *Phaenithon colonis* sp. nov.

♂♀. Similar to *Ph. baseopagus*, but proboscis very different, basal tubercle of elytra much higher, underside except abdomen dispersedly dotted with creamy white.

Proboscis twice as broad as long, white, depressed proximally in middle, with several longitudinal ridges at base, apical sinus smaller than in *Ph. baseopagus*, lateral margin from eye to above base of segment I of antenna straight, from here strongly slanting to apical margin, this oblique portion about half as long as the straight basal portion. Frons with longitudinal ridges, the two middle ones more regular than the others and united on occiput, the others branched and disappearing before reaching occiput, no single central carina. Distance of antennal groove from eye about equalling the length of segment II of antenna, the interspace being much wider than in *Ph. baseopagus*. Antenna reaching to about middle of prothorax, much shorter than in *Ph. baseopagus*, X transverse, XI slightly longer than IX and a little longer than broad.

Pronotum half as long again as broad, median depression before carina much broader and extending farther forward than in *Ph. baseopagus*, white spots in this depression more or less confluent, dorsal carina laterally slightly bent forward before turning apicad, the curve therefore more gradual than in *Ph. baseopagus*. Scutellum nearly perpendicular, larger, black, with a few minute dots at margins.

Elytra as in *Ph. baseopagus*, but basal tubercle much higher, interstice III subcostate, subapical convexity less regular, interstice III joining IX as a low ridge behind which there is a depression, at sides a large anterior area and a post-median one with fewer dots than in *Ph. baseopagus*. Pygidium flatter, not depressed laterally, therefore middle line not raised.

Thoracic sterna and sternum I of abdomen much less densely dotted than upperside, spots of abdomen pale yellow, more or less confluent; intercoxal process of mesosternum vertical, its apical portion horizontal, somewhat above the level of metasternum, tuberculiform angles much more elevate than in *Ph. baseopagus*. Femora and tibiae black, mid- and hindfemora sparsely dotted with white, mid- and hindtibiae with large pale-yellow median ring, all tarsi pale yellow, forefemur (♂) with small basal tubercle beneath, tip of foretibia with a tooth at apex of outer margin of underside, the underside with a deep groove to near base, inner side concave along cariniform dorsal margin, outer side somewhat convex. Abdomen depressed along middle.

Length 7.3–8.3, width 4.4 mm.

Brazil: Jatahy, Goyaz, 3 ♂♂.

57. *Phaenithon centralis* sp. nov.

♂♀. Close to *Ph. discifer* Jord. 1906, but pygidium and anal sternum longer (in ♀, the ♂ of *Ph. discifer* not known), apex of anal sternum less distinctly sinuate, sides of undersurface with large patches of creamy white pubescence.

Median area of proboscis somewhat depressed, covered by a creamy white stripe which is continued to base of pronotum, bare lateral area of rostrum wider than median area, coarsely rugate-plicate, angle of lateral margin nearer to eye than to base of mandible, interspace between antennal groove and eye below sinus narrower than antennal segment II. Brown or blackish patch at base of pronotum midway between middle and side variable in size.

Pygidium of ♂ broader than long, apical margin slightly straightened in middle. On side of prosternum two irregular creamy white stripes with dots in between, epimerum of mesothorax and episternum of metathorax creamy white for the greater part, on abdominal segments II and III a large, irregular, transverse patch. Mid- and hindtibiae dotted with white as in *Ph. discifer*; midtibia of ♂ with short sharp mucro. In ♂ abdomen medianly flattened-depressed.

Length 5.4–9.3, width 2.8–4.8 mm.

Amazonas (type) and French Guiana; in Carnegie Museum from Pará and Santarem.

#### 58. *Phaenithon moerosus* Boheman 1833.

A short species with white underside. Vitta of rostrum and frons broad, narrowed on occiput. Pronotum with straight median vitta, white pubescence of underside extending dorsad well above lateral carina, appearing in dorsal aspect as a lateral vitta, two brown spots between end of lateral carina and apical margin, the posterior one small, some white pubescence along dorsal carina. The only species known to me in which the elytra bear on subapical declivity a white transverse band well separated from apical margin. The type is a ♂; the abdomen is medianly flattened and each sternum bears a transverse band of white, long, silky pubescence, bands of II to V occupy the ventral third of their segment and are laterally sharply rounded, the first band short (in the transverse sense).

Length 6, width 2.8 mm.

"Brasilia. Dom. Freyreiss."—The type is the only specimen I have seen. Freyreiss evidently was in a place whence no material has come into my hands; see also *Gymnognathus signatus*, No. 24.

#### 59. *Phaenithon maculatus* Fabr. 1801.

*Hylesinus maculatus* Fabricius, *Syst. Eleuth.*, ii, p. 391, no. 8 (1801) (Amer. merid.).

The type is in the Museum at Copenhagen. I do not know into which family the species has been transferred by the Cataloguers. It is a *Phaenithon* very close to *Ph. similis* Jord. 1904, with three creamy-white vittae on pronotum, median one complete, in *Ph. similis* interrupted; markings of elytra almost exactly as in that species.

#### 60. *Phaenithon guttulatus* Fährs. 1839.

The type is a small ♀ of *Ph. curvipes* Germ. 1824.

#### 61. *Phaenithon implicatus* Fährs. 1839.

Dr. Lundblad informs me that the type is not at Stockholm, The description applies very well to *Ph. semigriseus* Germ. 1824, of which I consider *implicatus* to be a synonym. The species is common in South and Central America and varies a good deal in markings.

#### 62. *Euparius placidus* n. n.

*Euparius suturalis* Jordan, in *Biol. Cent.-Amer., Coleopt.*, iv, p. 348, no. 8, pl. 13, fig. 4 (1906),  
nec *E. suturalis* Jordan, *Nov. Zool.*, xi, p. 308, no. 144 (1904).

#### 63. *Euparius dipholis* sp. nov.

♀. Near *E. placidus*, in shape and colouring also resembling *Caccorhinus lateripictus* Jord. 1895 from New Guinea and Queensland. Pronotum with a conspicuous black spot each side before carina nearer side than middle.

Subcylindrical, a little more than two and one-half times as long as broad



(28: 11); derm of upperside rufescent, of underside blackish brown, posteriorly rufescent. Pubescence of upperside creamy white clouded with pale cinnamon. Rostrum creamy white, with short median carina; head pale cinnamon, white at side, frons more extended white than cinnamon. Antenna pale rufous buff, IX and X darker, IX as long as broad, X broader than long, XI ovate, one-fifth longer than broad.

Pronotum one-fifth broader than long, very densely punctate-coriaceous, almost reticulate at side, where the punctures are larger than on disc, conical, side hardly at all incurved before basal angle, slightly convex behind middle, disc convex transversely and longitudinally, without median channel, but there is a slight flattening in centre, with the scale-hairs parted right and left, the greater part of surface pale cinnamon, at each side of apex a white patch connected with a diffuse lateral stripe extending towards basal angle, black basal spot surrounded by white, especially on dorsal side, the white pubescence extending also along carina to a variable extent; angle of carina  $90^{\circ}$ .

Elytra cylindrical, punctate-striate, none of the interstices raised, suture slightly flattened in basal half, subbasal swellings indicated, not tuberculiform, before apical margin a depression, but the swelling above it evenly convex, not at all tuberculiform, in front of subbasal swelling a patch shaded with pale cinnamon, similar shading in middle, before apical declivity and at side, in interspace III an antemedian black spot, linear, this colour extended diffusely and indistinctly to line V of punctures, the area between this spot and subbasal swelling pure creamy white. Pygidium creamy white, almost semicircular, half as broad again as long in middle.

Anterior half of side of prosternite punctate, metasternite impunctate. Tibiae grey, base and apex brown like tarsi.

Length 5.7, width 2.2 mm.

Amazonas: Santarem, 2 ♀♀, type in Carnegie Museum.

#### 64. *Euparius nuchalis* sp. nov.

♀. Close to *E. dipholis*, No. 63, but pronotum with a large black basi-discal area nearly as in *E. thoracicus* Fährs. 1839.

End-segment of antenna pale, longer than in *E. dipholis*. Black area of pronotum occupying a little more than three-quarters of the base and extending forward across highest point of disc to five-sixths, gradually narrowing, apex of area incised medianly, behind its apex on highest point of disc a short transverse spur from grey lateral area projects into the black, before carina each side of middle an indication of a grey patch; laterally at some distance from carina a short backward spur of grey area indicating black spot of *E. dipholis*; there are also a few grey hairs indicating a median line; median angle of carina a little less rounded than in *E. dipholis*. Scutellum black.

On elytrum an irregularly rounded patch on subbasal swelling extended to base, a shoulder patch, a minute spot in interstices III and V before middle, and a larger sublateral one behind middle black.

Intercoxal process of mesosternite broader than coxa, broader than in *E. dipholis*, slightly concave. Base and extreme tip of tibiae and tarsal segments II to IV brown-black, derm of I luteous, its pubescence white as on tibiae.

Length 6.7, width 2.8 mm.

Bolivia: Cochabamba (Germain), 1 ♀.

65. *Euparius bruchi* sp. nov.

♀. Lateral angle of pronotal carina somewhat smaller than in *E. dipholis* and *E. nuchalis*, about the same as in *E. figuratus* Bohem. 1845; intercoxal process of mesosternum distinctly convex, but not humped.

Rostrum and head white, slightly shaded with pale ochraceous, black behind eye. Segments I to VIII of antenna rufescent, club darker, XI elliptical, subtruncate at base, a little longer than in *E. dipholis* and shorter than in *E. nuchalis*, XI not pale. White area of head continued to beyond convex middle of pronotum, not sharply defined, basal area and sides below white area buffish ochraceous, lower part of side above lateral carina black like underside of prosternum, sides coarsely punctate-rugate; dorsal carina concave in middle, not angulate, lateral carina in dorsal view very distinctly incurved before angle; within the white area two brown dots each side of middle, the posterior pair almost merged into the buffish ochraceous basal area. Scutellum white.

Elytra as in *E. nuchalis* and *E. dipholis* without tubercles, derm rufous, sides blackish, pubescence buffish ochraceous shaded with white, in middle a white diffuse patch in which there are four black dots, one each in III and V and, a little farther back and smaller, in IV and VII, on subbasal swelling a blackish double dot in a white cloud, apical declivity diffusely white, especially strongly on convex portion. Pygidium almost semicircular, white pubescence not concealing rufous derm.

Underside and legs black, with sparse white pubescence, anal sternum rufous, pubescent white, segment IV also somewhat densely pubescent at side; prosternite coarsely rugate-punctate, metasternite laterally with largish shallow punctures; intercoxal process of mesosternum apically narrower than coxa, distinctly convex. Tibiae with pale-rufous median ring pubescent white, one-third of segment I in foretarsus, two-thirds in mid- and hindtarsus white.

Length 6.1, width 2.6 mm.

Argentina: Province of Cordoba (Dr. C. Bruch), 1 ♀.

66. *Euparius stratus* sp. nov.

♀. Basal angle of pronotum less than  $60^\circ$ ; intercoxal process of mesosternum broad, emarginate, with broad subapical swelling; tarsi rufescent like tibiae. Nearest to *E. clitelliger* Fährs. 1839, but longer, proboscis not white, pronotum without median carina and with the basal angle more acute, subbasal tubercle of elytrum and subapical swelling much lower, punctures of line I much smaller, pygidium broader than long instead of longer than broad, etc.

Pubescence of upperside ochraceous buff mixed with white. On occiput an indication of a white median streak. End-segment of antenna pale creamy buff, half as long again as broad, ovate, shorter than IX + X.

Pronotum granulate-coriaceous, on disc almost smooth, less than one-half broader than long (7 : 5), depressed dorsally before carina, and along middle to near apex, disc swollen each side of middle, but not so much as in *E. clitelliger*, in the median channel a vestigial white stripe and on dorsal side of discal swelling a diffuse transverse white spot more or less connected with the white median pubescence, angle of carina nearly as acute as in *E. sellatus* Fährs. 1839, sides of pronotum gradually and very slightly incurved before angle, gently slanting to end of lateral carina, then more strongly slanting to apex. Scutellum white.

Elytra half as long again as broad, strongly punctate-striate, but the punctures on the whole smaller than in *E. clitelliger*, especially those of sutural line, which, in *E. clitelliger*, are partly confluent to form short grooves, subbasal tubercle quite distinct, but not so high as in *E. clitelliger*, behind it a transverse depression, sutural area flattened to apex bounded by interspace III, anteapical swelling much less prominent than in *E. clitelliger*, interstices III, V, VII and IX being much less convex, suture and alternate interstices more or less shaded with white and spotted with brown, from base of suture a white patch which extends sideways behind subbasal tubercle to interspace V, excised on suture. Pygidium much broader than long.

Pubescence of underside and legs pale creamy buff, not dense, sides of thoracic sternites coarsely punctate, abdomen without the row of white lateral spots of *E. clitelliger*; legs irrorated with white, tarsal segment I somewhat shorter than in *E. clitelliger*.

Length 9.1–10.7, width 4.1–4.8 mm.

Bolivia: Sta. Cruz de la Sierra (J. Steinbach), 1 ♀; also in Carnegie Museum from the same source.

#### 67. *Euparius mesculus* sp. nov.

♂. Very similar to *E. stratus* (No. 66), but mesosternal intercoxal process without median hump. Basal angle of pronotum less acute, median depression broader and less deep halfway to apex, with a slight median ridge. White sutural patch of elytra not continued to scutellum. Intercoxal process of mesosternum broader, emarginate, subapically convex, but not raised medianly into a rounded hump. Luteous velvety spot each side of median suture of metasternum sharply defined; side of metasternite without large punctures. Abdomen medianly flattened from base to apex, this area silky brown. Hind-tarsus compressed, stout, first segment apically thicker than apex of hindtibia.

Length 8.3, width 4.0 mm.

Amazonas, 2 ♂♂.

#### 68. *Euparius anceps* sp. nov.

♀. Likewise similar to *E. stratus*, but rostrum, head, apex of elytra and pygidium white; intercoxal process of mesosternum with low hump.

The white pubescence of head continued to middle of disc of pronotum, spreading a little sideward-backward and being medianly divided from behind for some distance, median depression very shallow before carina, hardly at all extended forward, the centre of disc being very feebly flattened, lateral angle of carina as in *E. stratus*. Scutellum white.

Elytra less strongly punctate-striate than in *E. stratus*, the interspaces flatter, subbasal swelling less high, gradually fading away laterally, interspace IV not strongly depressed at base, depression behind subbasal swelling very feeble in interspace III, from near scutellum to near middle a diffuse white area, extending laterally to interspace V, not sharply defined, behind it in interspace III a conspicuous black tuft, not a tubercle, a similar but smaller tuft a little farther back in VII with some white pubescence before it, suture with minute brown dots, alternate interspaces with traces of such dots and a slight white suffusion; white apical area from apical margin to above subapical hump, wider at sides and less well defined dorsally. Pygidium one-third broader than

long, middle of its apical margin slightly straightened (as is also the case with abdominal segment V).

Underside of body and the legs white, the body a little shaded with buff; sides of sterna with the punctures vestigial, just discernible on removing the pubescence; foretarsus and segments II to IV of mid- and hindtarsi brown, as are extreme tips of tibiae.

Length 7.7, width 4.3 mm.

Brazil: Ilha Santo Amaro, near Santos, iv. 1912, 1 ♀ (G. E. Bryant).

#### 69. *Euparius amictus* sp. nov.

♂♀. Near *E. albiceps* Jord. 1904, mesosternal, intercoxal process with tubercle, elytrum with subbasal and anteapical tubercles high, underside uniformly pubescent greyish white, not irrorated as in *E. albiceps*.

Head and rostrum greyish white, centre of occiput slightly olivaceous. Antenna rufescent brown, club about as long as IV to VIII, XI pale, elongate-elliptical, twice as long as broad, somewhat longer than IX.

Pronotum olivaceous buff, disc strongly swollen each side of middle into a broad tuberculiform elevation, from this swelling forward an ill-defined greyish white stripe, area before basal angle with a similar tint in certain lights, in front of scutellum a transverse, triangular area bounded in front by an anguliform depression extending halfway to side, ending at an oblong black spot in front of carina, the spot longer than broad, basal angle acute, strongly produced backward, side incurved in front of angle and then excurved, the apex of lateral carina on a sideward projection.

Elytra two-thirds longer than broad, strongly flattened-depressed from suture to interspace IV, subbasal swelling a high, broad, rounded tubercle, before apical declivity a less broad but higher tubercle directed backwards, depressed area greyish white, this colour extending a little sideways before and behind middle and running across subapical tubercle, lateral area olivaceous buff, with some diffuse greyish white smears, in interspace IV an antemedian black tuft, another of the same colour in VII a little farther back in a greyish white stripe. Pygidium olivaceous buff, greyish white at base, apex and along middle, in ♂ one-sixth broader than long, in ♀ two-fifths.

Tubercle of mesosternal process projecting forward-downward; sides of abdomen shaded with olivaceous; the extreme bases and tips of tibiae and the tarsal segments II and III brown, underside of foretarsus long-hairy in ♂.

Length 12.7–13.7, width 5.7–6.1 mm.

Amazonas: Pará, 1 ♂, 2 ♀♀, type (♂) in Carnegie Museum.

#### 70. *Euparius longiclava* sp. nov.

♂♀. Intercoxal process of mesosternum slanting, without central tubercle. End-segment of antenna linear, more than four times as long as broad, nearly twice as long as IX + X, as long as III to VIII together. Colouring of elytra nearly as in *E. albiceps* Jord. 1904 and *E. tarsalis* Jord. 1906, tarsi blackish as in the latter. An elongate species, nearly three times as long as broad.

Pubescence of head, rostrum and pronotum ochraceous buff mixed with greyish white. Rostrum depressed in middle, with a slightly raised median line. Antenna pitchy brown, IV to VIII paler, tip of XI pale buff, club loose, i.e. X



and XI with short basal stalk, this stalk inserted in apex of preceding segment near posterior angle, IX half as long again as broad, X very little longer than broad.

Pronotum one-half broader than long, very densely punctate-coriaceous, depressed before carina and also slightly along middle, disc somewhat swollen each side of middle, but the swelling not tuberculiform, basal angle acute, side gradually incurved before angle and then excurved, oblique from middle to apex.

Elytra twice as long as broad, distinctly punctate-striate, interspaces more or less convex, especially III, suture and interspace II flat, depressed, the depression deeper behind subbasal swelling and extended to interspace III, subbasal swelling distinct, but not very high, forming a low, rounded, tubercle, before apical margin an impression and above this the elytrum strongly convex, projecting backwards, not upwards, with interspaces III, V and VII almost costate, but raised as a tubercle, depressed sutural area greyish white, expanding before and behind middle to interspace V inclusive, suture and outer margin somewhat tessellated with brown, pubescence of sides of elytra as on pronotum, interspaces III and V in middle and before apical swelling brown. Pygidium ochraceous buff mixed with white, broader than long, apex rounded in ♂, slightly truncate in ♀.

Underside pubescent white, the pubescence not dense. Extreme bases and tips of tibiae and tarsi blackish brown, III and IV of tarsi paler.

Length 9.7-13.0, width 3.7-5.2 mm.

Brazil: Jatahy, Goyaz, type ♂; and in Carnegie Museum from Rio de Janeiro.

#### 71. *Euparius medialis* sp. nov.

.♂ In shape and colouring similar to *E. calcaratus* Jord. 1904, but basal angle of pronotum more acute, mesosternal process without tubercle, hindtibia (♂) without spur at apex.

Elongate, nearly thrice as long as broad. Pubescence of upperside ochraceous buff mixed with white. Proboscis with black median channel at base, the united edges of which form forward and backward (on frons) a very thin carina. Segment XI of antenna pale, nearly as long as IX + X, elongate-elliptical, twice as long as broad.

Pronotum one-fourth broader than long, very densely punctate-coriaceous, dorsally depressed before carina, disc less convex in middle than at each side of middle, but not impressed, white pubescence in evidence in middle and at sides, there being a diffuse white median stripe from base forward, interrupted in middle and vestigial at apex, at side from tip of lateral carina to apical margin a dark area as continuation of the colouring of prosternite, this area bounded above by more or less scattered white pubescence; basal angle about 80°, side of pronotum feebly incurved in front of angle and then slightly convex, the pronotum gradually narrowing from apex of lateral carina.

Elytra with parallel margins, depressed at suture, subbasal swellings very distinct, but not forming prominent tubercles, interspaces III, V and VII somewhat convex in posterior half, before apex an impression above which there is a prominent swelling, but no tubercle, sutural area white from base to apical declivity, on declivity restricted to sutural interstice, behind subbasal callosity widened to punctate line V and again behind middle for a shorter stretch, apical

half of suture minutely dotted with brown, III and alternate interspaces with brown and diffuse white spots, not regularly tessellated.

Pubescence of underside creamy white, not very dense, derm of thoracic sterna more or less blackish; mesosternal process slightly concave in basal half, obtusely angulate at side, more strongly slanting backwards from this point; anterior lateral area of prosternum as densely punctured as pronotum, side of metasternite with scattered punctures; abdomen ( $\sigma$ ) medianly flattened; tarsal segments II to IV with little or no white pubescence on upperside.

Length 9.0, width 3.4 mm.

Bolivia: Sta. Cruz de la Sierra (J. Steinbach), 2  $\sigma\sigma$ , type in Carnegie Museum.

### **Euxuthus** gen. nov.

Like *Euparius* Schönh. 1826, but eye sinuate, the sinus small, interrupting three or four lines of facets. Labiophore very short and broad, in middle only half as long as its base is broad between ends of buccal fissures. Prosternum in front of coxa less than half as wide (longitudinally) as forecoxa. Intercostal process of mesosternum much broader than coxa, slanting, flat, truncate, feebly emarginate.—Genotype: sp. nov. here described.

#### 72. **Euxuthus homochrous** sp. nov.

$\sigma\sigma$ . Ovate, strongly and evenly convex. Entirely rufescent ochraceous, covered with a slightly paler pubescence which has golden and creamy reflections, only segments VII (or VI) to XI of antenna differ in colour, being pitchy black, and the apex of mandible, which is rufescent brown.

Rostrum with narrow median carina, which does not reach apex, traverses frons and disappears before reaching occiput, median sinus of apical margin small; lateral margin very obtusely angulate above antennal groove, the margin from this point forward rather strongly slanting. Antenna of the same type as in *Euparius*; club gradually widening to basal half of XI, this segment longer than IX, ovate, with the base subtruncate.

Pronotum one-third broader than long, finely coriaceous, dorsal carina concave medianly, convex towards sides, lateral angle  $90^\circ$ , with the tip rounded off, lateral carina ending before reaching meral suture, but continued across this suture by a thin line.

Elytra one-fourth longer than broad, punctate-striate, the stripes obsolescent behind, no dorsal depression, no distinct subbasal swelling. Pygidium half as long again as broad, evenly rounded. Segment I of tarsi less than one-third longer than II + III, claw-segment about as long as II. Abdomen medianly slightly flattened in  $\sigma$ .

Length 5.0–5.2, width 2.6 mm.

Colombia: Cacagualita; a small series; type in Carnegie Museum.

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